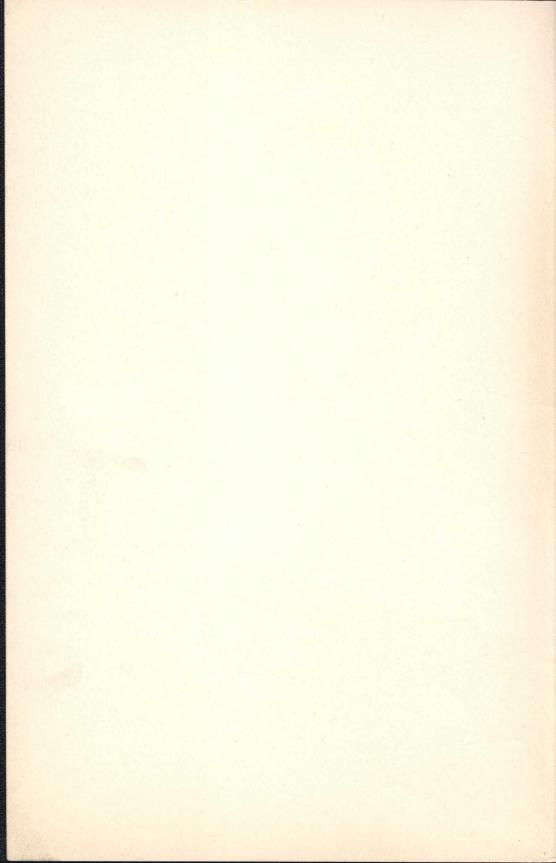




# - PIPE TOOLS OF SUPERIOR MERIT

"TOLEDO" TRADE-MARK



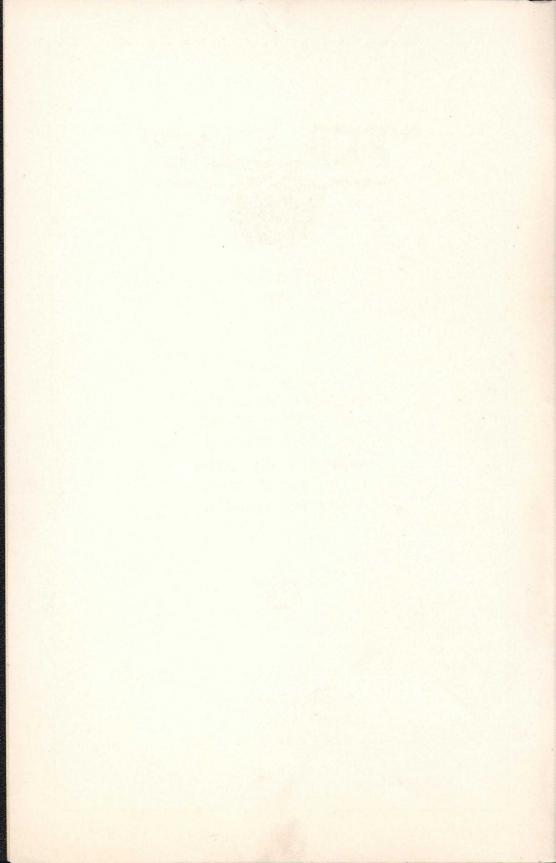


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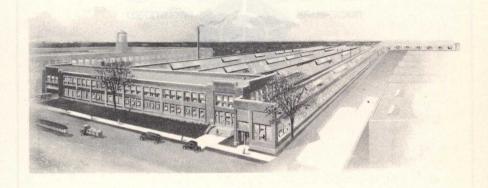
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PIPE THREADING DEVICES, PIPE CUTTERS, REAMER, PIPE VISES, PORTABLE WORK BENCHES, BORING TOOL, POWER DRIVES, POWER PIPE MACHINES



THE TOLEDO PIPE THREADING MACHINE CO.

1425-1445 Summit Street
TOLEDO, OHIO, U. S. A.
Cable Address: "THREADING-TOLEDO"



THE constantly increasing demand for "TOLEDOS" has made necessary many additions to this big, modern, fire-proof, day-light factory where "TO-LEDOS" are conceived, designed, built and shipped to all parts of the world.

Every known machine and device is utilized, assuring the most perfect product it is possible to build. Quality and designs practical for hard exacting service are matters of first consideration, all of which assure purchasers of "TOLEDO" trade-marked equipment maximum efficiency and satisfaction.



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E HAVE earnestly endeavored to make this new "TOLEDO" catalog, issued in the winter of 1930-1931 the finest and most complete catalog of pipe threading and cutting devices and kindred equipment that has ever been produced. We believe it is worthy of your careful attention for it covers the complete "TOLEDO" line which is recognized by piping contractors and operators throughout the world as the standard pipe tool equipment. You no doubt will find herein tools, machines, etc., that will meet your particular needs and will help to reduce operating expenses and lighten the work on your piping jobs as they are doing for thousands of owners today.

"TOLEDO" Pipe Threading Devices are classed in two groups, the "TOLEDO" receding die tools, which were the first of the so-called easy operating threaders and the non-receding die tools.

The non-receding tools referred to are the No. 00, No. 11, No. 30 and No. 31 illustrated on pages 10, 11 and 12, and the power threading machines shown on pages 42 to 49 inclusive. These tools and machines use segmental dies, mounted rigidly in die heads. The dies are given just the proper rake and clearance to do their work with the least amount of labor or power.

The group of receding die threading tools constitute the backbone of the "TOLEDO" line. These tools are unique as the receding die principle which minimizes friction, greatly reduces the work of threading pipe and is accomplished by exceedingly simple mechanical means.

These tools are the No. 1, No. 1A, No.  $1\frac{1}{2}R$ , No. 2, No.  $2\frac{1}{2}$ , No. 3 and No. 4 shown on pages 14, 15, 18, 21, 23, 24 and 25. If you are not familiar with the mechanical principle of these tools, we set forth the following details accompanied by illustrations to make same clear.

Each tool consists of three main parts: The rear portion, or pipe holder, fastened tight to the pipe; a middle portion, or taper pin plate,



which rotates on the pipe holder and carries a series of posts or pins, which posts or pins are machined with a tapering surface, corresponding to the standard pipe-thread taper; and a front portion, or die head hav-



ing a lead screw that meshes with a corresponding lead screw in the pipe holder.

In operation, the die head is rotated and carries around with it the taper pin plate and its series of taper pins. These taper pins project through corresponding holes in the die head. These holes are at the outer end of a series of slots that contain the die segments.



"TOLEDO" die segments differ from all preceding forms of pipe threading dies in that they only contain enough teeth on their cutting edge to form a thread. These die segments lie loose in their slots, the rear ends of same resting against the tapering surface of the taper pins heretofore referred to.

In operation, a "TOLEDO" tool is put on a pipe and the rear portion of the tool is bolted tight to the pipe. Then the die head is rotated in the customary

manner. The lead screw heretofore referred to, pulls the die head onto the pipe, and as the die head travels on the pipe, it consequently travels along the series of taper pins. The dies, which are all the time cutting their thread, naturally force themselves back against the constantly receding surface of these taper pins. When a thread has been cut as long as is necessary, it is found that this receding action of the die segments has produced a thread of standard taper on the pipe.

The fact that the die segments only have a very few teeth, and are constantly relieving themselves from friction by backing away from the pipe as already outlined, makes the labor of threading pipe tremendously easier than the old method.

Thus it became possible for one man not only to thread 1" pipe, but 2", 4", 8" and finally 12" pipe.

As the years have gone by, other tools embodying the same principle but slightly different in construction have been produced. Thus our No. 0, No. 10 and No. 10A models have instead of taper pins, a die head case that contains a series of tapering steps, permitting these tools threading a number of sizes of pipe with one set of dies. Also our No. 25 tool, threading pipe from  $2\frac{1}{2}$ 11 to 611 inclusive, utilizes an adjusting ratchet for each die holder, thus permitting this tool to thread seven sizes of pipe with one set of dies.



"TOLEDO" Pipe Cutters shown on pages 28, 29, 30 and 31 instead of squeezing the pipe apart, leaving a burr and rough edge, cut the pipe off, leaving a straight square-end cut without burr. We call your particular attention to the "TOLEDO" Automatic Pipe Cutters described on pages 28 and 29. These tools are very simple in construction, easy to operate and have set a new standard in cutting off 2" to 8" pipe. They are remarkable tools, and should have your careful consideration.

"TOLEDO" Power Drives described on pages 34 to 38 inclusive, have for many years been standard equipment with thousands of contractors. They will prove their ability to reduce operating expenses and increase the efficiency of the operator by converting hand operated threading tools and cutters into swift, highly efficient power machines. "TOLEDO" Power Drives are strictly portable, powerful beyond all needs and may be connected to the threading or cutting tool instantly.

The "TOLEDO" Flange Facing Machine described on page 39 is a remarkable labor saving device for facing off flanges or vanstone joints. It is a highly valuable machine for power plant contractors and engineers. The "TOLEDO" No. 999 and the "TOLEDO" No. 1000M Power Pipe Machines, described on pages 42 to 49, inclusive, are unusually efficient machines for cutting, threading and reaming  $\frac{1}{2}$ " to 2" pipe. The No. 999 is strictly portable and may be easily carried by two men. The No. 1000M is the semi-portable type machine. Both are very rapid, high-production pipe machines.

The "TOLEDO" Ratchet Pipe Reamer, described on page 51, you will note has many superior features to other reamers on the market. "TO-LEDO" Pipe Vises described on page 52 and "TOLEDO" Portable Work Benches, described on pages 53 to 55, as well as the "TO-LEDO" Ratchet Boring Tool shown on page 56. are all exceedingly desirable items of the "TOLEDO" line.





THE name "TOLEDO" and this pentagon trade-mark appearing on pipe threading and cutting tools and dies, is our guarantee of the highest quality.

This trade-mark is recognized by users of pipe tools as representing the last word in pipe threaders and cutters. It has achieved this reputation after years of honest effort in building a perfect product, and appears only on genuine "TOLEDO" tools.

We suggest, therefore, when purchasing new pipe threading and cutting tools, you look for this pentagon trade-mark on the name plate and also on the box, and thus assure yourself of a genuine "TOLEDO" tool that will give you the maximum amount of service and satisfaction.



All genuine "TOLEDO" dies are now marked with the trade-mark as shown above. Back of this mark is a quarter of a century experience in making pipe dies as nearly perfect as possible, and you will find genuine "TOLEDO" dies easier cutting and more satisfactory than any other dies on the market. Be sure, therefore, that extra dies you purchase for your "TOLEDO" tools bear this mark of quality.

### GUARANTEE

All genuine "TOLEDO" products are guaranteed against defects. If returned to us, transportation charges prepaid, and found to be defective, such defective material will be replaced or credited.





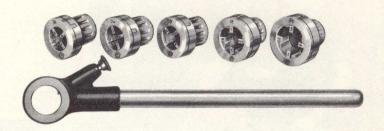
The "TOLEDO" No. 00 is an excellent small, compact tool to thread small pipe. The two upper illustrations show the quick change of die heads. The view to the right shows the No. 00 with special inverted dies threading a short piece of pipe, tight against a brick wall. Below a "TOLEDO" No. 11 (½" to 1½") pipe threader is threading 1½" pipe in a corner between wall and radiator. Both the No. 00 and No. 11 are ideal tools for close corners.





In the upper illustration, the operator is reading the few simple operating instructions. There is nothing at all complicated in "TOLEDO'S." In the center, a 2" pipe down in the trench is being threaded easily by a workman operating the ratchet handle of his "TOLEDO" No. 1A tool with his right hand, and with his left holding the pipe steady with a pair of tongs. Below a "TOLEDO" 3-Way tool has just completed cutting a long running thread on a 34" conduit. "TOLEDO" 3-Way tools with special electric conduit dies do this work perfectly.





"Toledo" Ratchet Pipe Threading Device No. 00
CAPACITY 1/8" to 3/4" PIPE, INCLUSIVE

This tool is very desirable for threading small pipe. It is the lightest and most compact ratchet threader on the market. Easily carried in the pocket as it is but  $16\frac{1}{2}$ <sup>11</sup> long, and will thread pipe in corners where other tools are useless.

It cuts standard threads of full taper with a few easy strokes of the ratchet handle. The die heads are instantly changed from one size to another, simply by pulling the ratchet pawl knob and allowing one head to drop out and another in. The die segments can be removed and reground when dull, or replaced at small expense without purchasing complete new heads.

The complete tool consists of the ratchet handle and 1/8", 1/4", 3/8", 1/2" and 3/4"

die heads complete with right hand dies, all packed in a strong carton. If complete tool is not desired, the ratchet handle and any selection of die heads may be ordered.



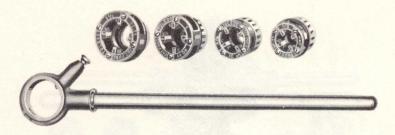
Equipped with bolt dies, the No. 00 is an excellent tool to thread bolts, hanger rods, etc.

We can furnish  $\frac{3}{8}$ !',  $\frac{1}{2}$ !', and  $\frac{3}{4}$ !' special die heads for cutting left hand threads,  $\frac{3}{4}$ !' die head for cutting fine threads on Boston brass tubing, and also  $\frac{3}{8}$ !' to  $\frac{3}{4}$ !' die heads with inverted dies for threading close to wall or ceiling. We can also furnish  $\frac{1}{4}$ !' to  $\frac{7}{8}$ !' bolt dies and die heads on special order.

List Price	Net Wt.	Ship. Wt.	Code
\$19.00	9 lbs.	10 lbs.	Abaiser
3.00		3 lbs.	Abator
3.00	1 1/4 lbs.	2 lbs.	Abscond
3.00	1 1/4 lbs.	2 lbs.	Acacia
3.00	1 1/4 lbs.	2 lbs.	Accede
3.50	1 1/2 lbs.	2 lbs.	Actor
3.50	1 1/2 lbs.	2 lbs.	Addict
2.00	2 oz.	2 oz.	*
3.00 Net	1 1/2 lbs.	2 lbs.	
	\$19.00 3.00 3.00 3.00 3.00 3.50 3.50 2.00	\$19.00 9 lbs. 3.00 2½ lbs. 3.00 1½ lbs. 3.00 1¼ lbs. 3.00 1¼ lbs. 3.50 1½ lbs. 3.50 1½ lbs. 2.00 2 oz.	\$19.00 9 lbs. 10 lbs. 3.00 2½ lbs. 3 lbs. 3.00 1½ lbs. 2 lbs. 3.00 1¼ lbs. 2 lbs. 3.00 1¼ lbs. 2 lbs. 3.00 1½ lbs. 2 lbs. 3.50 1½ lbs. 2 lbs. 3.50 1½ lbs. 2 lbs. 2.00 2 oz. 2 oz.

Complete list of repair parts for No. 00 on page 59. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





# "Toledo" Ratchet Pipe Threading Device No. 11 CAPACITY 1/2" to 11/4" PIPE, INCLUSIVE

This ratchet tool is similar in design to the No. 00 except that it is somewhat larger. It is very light and compact and reaches the most difficult corner job. It threads pipe very easily and produces perfect tapered threads.

The die heads are instantly changed by pulling the ratchet pawl knob. The die segments can be removed when dull and be easily reground or replaced at small expense without having to order complete new die heads.

This tool is especially adapted for the electrician and when fitted with the special dies for producing the straight lock-nut threads on electric conduit, it is an excellent tool for this work.

The complete tool consists of the ratchet

3/8" Die head and dies can be furnished on special order.

handle, 1/2", 3/4", 1" and 1 1/4" right hand die heads with dies, all packed in a strong carton. If complete tool is not desired any combination of die heads may be ordered. A 3/8" die head with dies can be furnished if ordered special.



The No. 11 is strongly built and has ample chip clearance.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 11 Complete 1/2" to 11/4"	\$24.00	101/2 lbs.	12 lbs.	Acerb
Ratchet	4.00	31/4 lbs.	4 lbs.	Accost
1/2" Die Head with Dies	5.00	13/4 lbs.	2 lbs.	Accrue
3/4" Die Head with Dies	5.00	13/4 lbs.	2 lbs.	Achime
1" Die Head with Dies	5.00	2 lbs.	2 lbs.	Acquit
11/4" Die Head with Dies		2 lbs.	2 lbs.	Acid
1/2" or 3/4" Dies only, per set	2.00	9 oz.	2 oz.	*
1" or 11/4" Dies only, per set.	2.50	4 oz.	4 oz.	*
3/8" Die Head with Dies	5.00	13/4 lbs.	2 lbs.	Acknow
3/811 Dies only, per set	2.00	2 oz.	2 oz.	Abear
*See code page 86.				

Complete list of repair parts for No. 11 on page 60. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





### "Toledo" 3-Way Pipe Threading Devices

No. 30—CAPACITY 3/811 to 3/411 PIPE, INCLUSIVE No. 31—CAPACITY 1/211 to 111 PIPE, INCLUSIVE

The lightest, the smallest and easiest to operate of all tools of this character. No. 30 weighs only  $4^{3/4}$  pounds. No. 31 weighs but 7 pounds. The tool bodies are about the size of a baseball, each die head being "on center" and the handles projecting from either side, thus producing a perfectly balanced tool.

"TOLEDO" 3-Way tools with the patented design of the tool body, permits the use of segmental dies possessing the "TOLEDO" easy cutting quality. These die segments are removable and can be reground or replaced with new ones at slight cost. Brass pipe is threaded perfectly with either the No. 30 or No. 31.



"TOLEDO" 3-Ways are so small and compact they are easily held in the palm of the hand.

When assembled ready for use there are no adjustments necessary, no loose parts. The die heads are always ready to cut standard threads. The tool body is designed to readily clear itself of chips and will not become clogged with dirt.

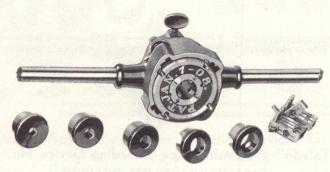
Both the No. 30 and No. 31 stools can be furnished at no extra cost, for electricians equipped with special dies that produce straight, lock-nut threads so desirable for the perfect conduit job.

Each tool is packed complete with two handles in a strong carton.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 30, Complete 3/811 to 3/411	\$15.00	43/4 lbs.	53/4 lbs.	Acture
No. 31, Complete 1/2" to 1"	18.00	7 lbs.	81/4 lbs.	Adam
1 Set 3/8" Dies No. 30	2.00	2 oz.	2 oz.	Abear
1 Set 1/2" Dies No. 30 or No. 31.	2.00	2 oz.	2 oz.	Aberrant
1 Set 3/4" Dies No. 30 or No. 31.	2.00	2 oz.	2 oz.	Abet
1 Set 1" Dies No. 31		4 oz.	4 oz.	Addle

Complete list of repair parts for No. 30 and No. 31 on page 61. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





"Toledo" Adjustable Pipe Threading Device No. 0
CAPACITY 1/8" to 3/4" PIPE, INCLUSIVE

This little "TOLEDO" weighs but eight pounds, and the total length, from tip to tip of handles, is 24".

It differs from every other tool of its capacity in that it embodies the celebrated "TOLEDO" receding die feature for threading  $\frac{1}{2}$ ! and  $\frac{3}{4}$ ! pipe and producing perfectly tapered threads. It is the easiest operating tool for these sizes. A locking pin, shown in the illustration below, instantly locks the die head and pipe

holder and is used only when threading  $\frac{1}{8}$ !,  $\frac{1}{4}$ ! and  $\frac{3}{8}$ ! pipe. The dies are changed from one size to another simply by slipping them in the proper steps of the die head case. The adjustment is easily and quickly made and it is positive. One set of dies is used for threading  $\frac{1}{8}$ !, a second set for  $\frac{1}{4}$ ! and  $\frac{3}{8}$ ! and a third set for  $\frac{1}{2}$ ! and  $\frac{3}{4}$ ! pipe. The tool is adjustable to cut over or under size threads as well as standard threads.

The complete tool consists of a tool body, two handles, complete set of  $\frac{1}{8}$ ! to  $\frac{3}{4}$ ! right hand dies and bushings, an instruction card, all packed in a wood box.

Left hand dies can be furnished on special order, but it requires a separate set for each size pipe.



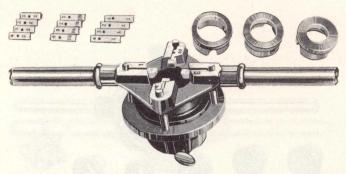
Dies projecting above case set for cutting undersize thread.

Note locking pin used when threading ½", ¼" and ½".

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 0, Complete 1/8" to 3/4"	\$16.00	8 lbs.	11 lbs.	Abacus
1 Complete Set R. H. Dies	7.50	13 oz.	1 lb.	Abdomen
1 Set 1/8" R. H. Dies	2.50	5 oz.	1 lb.	Abdalla
1 Set 1/4" x 3/8" R. H. Dies	2.50	4 oz.	1 lb.	Abdal
1 Set 1/2" x 3/4" R. H. Dies	2.50	4 oz.	1 lb.	Abdicate
1 Complete Set L. H. Dies	12.50	11/4 lbs.	2 lbs.	Abreast
1 Set Left Hand, each size (4 se	gments) 2.50	4 oz.	1 lb.	*
*See code page 86.				

Complete list of repair parts for No. 0 on page 62. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





"Toledo" Adjustable Pipe Threading Device No. 1
CAPACITY 1" to 2" PIPE, INCLUSIVE

This model was the first of the so-called easy operating threaders and for years has been considered by users as the "last word" in 1" to 2" threading tools. It has been the standard by which all other pipe threading devices have been compared, and, with the exception of the No. 1 A Ratchet Tool shown on the next page, nothing has ever taken its place.

It utilizes the "TOLEDO" receding die principle, described on page 5, and threads pipe so easily that a boy can operate it. It may be instantly adjusted for cutting over and under size as well as standard threads and produces perfectly true tapered threads at all times. It is strong and durable, and like all genuine "TOLEDO" tools, will stand years of service.



Brass pipe is threaded perfectly with these dies and the regular No. 1 or No. 1A.

Brass pipe dies that will thread 1" to 2" brass pipe or special dies for threading wrought iron pipe perfectly with either this regular No. 1 or the No. 1 A ratchet model can be furnished on special order. Special tools are not necessary for this work.

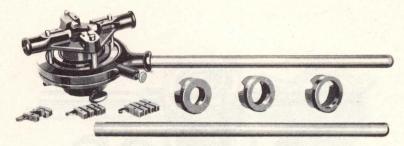
The complete tool consists of the tool body, two handles, complete set of 1" to 2" right hand dies and bushings, an instruction card, all packed in a wood box.

It can also be furnished at a slightly higher net price (reversed in all its parts) for cutting left hand threads—neither tool will do both.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 1, Complete 1" to 2"	\$24.00	19 lbs.	23 lbs.	Abandon
1 Complete Set R. H. Dies		23 oz.	2 lbs.	Absolute
1 Set 1" R. H. Dies	2.50	7 oz.	1 lb.	Abide
1 Set 11/4" R. H. Dies	2.50	6 oz.	1 lb.	Ability
1 Set 11/2" R. H. Dies	2.50	6 oz.	1 lb.	Above
1 Set 211 R. H. Dies		5 oz.	1 lb.	Abrogate
1 Single Set only 1", 11/4", 11/2"	or 2!!			The second
Dies for Wrought Iron Pipe	1.00 Net	6 oz.	1 lb.	
1 Single Set only 11, 11/41, 1	1/2 '' or			
2" Brass Pipe Dies		6 oz.	1 lb.	
2" Brass Pipe Dies	1.00 Net	O OZ.	1 10.	

Complete list of repair parts for No. 1 Tool on page 63. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





"Toledo" Adjustable Ratchet Threading Device No. 1A

This model is like the No. 1 except equipped with a ratchet which makes it easy to thread pipe in restricted places. It may be used with two handles as an ordinary die stock when desired. It is by all odds the easiest operating 1" to 2" pipe threader.

The complete tool consists of the tool body, two handles, complete set of 1" to 2" right hand dies and bushings, an instruction card, all packed in a wood box.

It can also be furnished at a slightly higher net price (reversed in all its parts) for cutting left hand threads—neither tool will do both.

It is also made up specially for threading electrical conduit, producing a straight thread with only a short taper at the bottom. An excellent tool for the electrician.

It can also be furnished for cutting special threads on either  $1\frac{7}{16}$  or  $1\frac{1}{2}$  locomotive superheater tubes. Brass pipe dies that will thread 1" to 2" brass pipe or special dies for threading wrought iron pipe perfectly with either the regular No. 1 or No. 1 A models can be supplied on special order. Special tools are not necessary for this work.

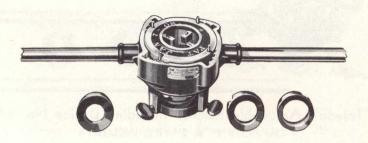


Taper pins permit adjustment for any depth threads.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 1A, Complete 1" to 2"		22 lbs.	28 lbs.	Abaft
No. 1A, Special Conduit Device, of				W. W. L. D.
plete		22 lbs.	28 lbs.	Abrupt
No. 1A, Special Superheater Dev	vice,			
complete	30.00	20 lbs.	26 lbs.	Super
1 Complete Set R. H. Dies	10.00	23 oz.	2 lbs.	Absolute
1 Set 1" R. H. Dies	2.50	7 oz.	1 lb.	Abide
1 Set 11/4" R. H. Dies		6 oz.	1 lb.	Ability
1 Set 11/2" R. H. Dies		6 oz.	1 lb.	Above
1 Set 2" R. H. Dies	2.50	5 oz.	1 lb.	Abrogate
1 Single Set only 1", 11/4", 11/2"				
2" Dies for Wrought Iron Pipe	1.00 Net	6 oz.	1 lb.	
1 Single Set only 1", 11/4", 11/2"	or or			
2" Brass Pipe Dies	1.00 Net	6 oz.	1 lb.	

Complete list of repair parts for No. 1A Tool on page 64. Prices apply for American standard tools only. other tools will be quoted on specially as occasion arises.





### "Toledo" Adjustable Pipe Threading Device No. 10

CAPACITY 1" to 2" PIPE, INCLUSIVE

This model is designed for the operator who desires a tool using one set of dies to thread several sizes of pipe and for a tool of this type threads pipe easily. It is a receding die type of tool and has but very few working parts.

The die head holding the die segments is surrounded by a step case having four sets of steps against which the dies rest. When threading pipe, the dies move down these steps gradually receding and thus producing a long thread of standard taper, that insures tight joints.



"TOLEDO" No. 10 and No. 10A dies made of high speed steel cut easily and smoothly.

This tool is adjustable for cutting over or under size threads as well as standard, and is one of the most popular tools of this character and capacity on the market. It is strongly built and very durable.

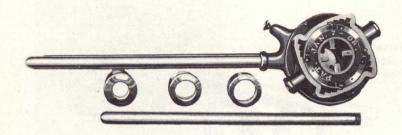
The complete tool consists of the tool body with one set of 1' to 2' right hand dies, one complete set of bushings and two handles, an instruction card, all packed in a wood box.

It is possible to cut left hand threads with this tool, and left hand dies can be furnished on special order. When cutting left hand threads, however it requires a separate set of dies for each size of pipe.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 10, Complete 1" to 2"	\$28.00	19 lbs.	25 lbs.	Hail
1 Set R. H. Dies (1" to 2")	2.75	11 oz.	1 lb.	Hector
1 Complete Set L. H. Dies	11.00	23/4 lbs.	3 lb.	Herb
1 Set 1" L. H. Dies	2.75	12 oz.	1 lb.	Hedge
1 Set 11/4" L. H. Dies		11 oz.	1 lb.	Heel
1 Set 11/2" L. H. Dies	2.75	10 oz.	1 lb.	Helmet
1 Set 2" L. H. Dies		9 oz.	1 lb.	Hemlock

Complete list of repair parts for No. 10 Tool on page 65. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





## "Toledo" Adjustable Ratchet Threading Device No. 10A

CAPACITY 1" to 2" PIPE, INCLUSIVE

Is like the No. 10 model, except that it is equipped with a ratchet, thus making it desirable for cutting threads in trenches or restricted places. It is strongly built and like the No. 10 is capable of cutting under size or over size as well as standard threads.

The right hand dies used in the No. 10 and No. 10A tools are made of high speed

steel and will give an astonishing amount of service. Like all "TOLEDO" dies, they can be easily resharpened when they become dull. They are very accurately hobbed and ground with the proper clearance to assure very easy cutting and smooth perfect threads.

The complete tool consists of the tool body, one set of 1" to 2" right hand dies, one complete set of bushings, two handles, and an instruction card, all packed in a wood box.

Left hand dies can be furnished on special order, but it requires a separate set for each size pipe. Since left hand dies are not subject to such constant usage as right hand dies, they are not made of high speed steel.

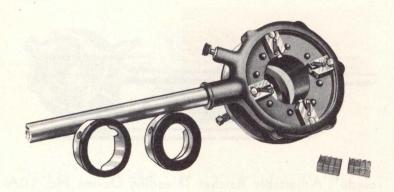


Tapered sleps permit quick.
positive die change.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 10A, Complete, 1" to 2"	\$34.00	26 lbs.	32 lbs.	Halter
1 Set R. H. Dies 1" to 2"	2.75	11 oz.	1 lb.	Hector
1 Complete Set L. H. Dies		23/4 lbs.	3 lbs.	Herb
1 Set 1" L. H. Dies	2.75	12 oz.	1 lb.	Hedge
1 Set 11/4" L. H. Dies	2.75	11 oz.	1 lb.	Heel
1 Set 11/2" L. H. Dies	2.75	10 oz.	1 lb.	Helmet
1 Set 2" L. H. Dies	2.75	9 oz.	1 lb.	Hemlock

Complete list of repair parts for No. 10A Tool on page 65. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





### "Toledo" Adjustable Ratchet Threading Device No. 11/2R

CAPACITY 21/2" and 3" PIPE

This is a ratchet operated mechanism, light and compact, weighing about 37 lbs., for threading 2½' and 3" pipe. It is direct acting having no gearing, but as it utilizes the "TOLEDO" receding die principle it operates easier than other direct acting tools on these sizes.

This model is also made as a special tool for threading oil well tubing of 2'',  $2\frac{1}{2}''$  and 3'' sizes. This special model cuts threads  $11\frac{1}{2}$  turns to the inch, and must not



The No. 1½R is simple in construction, light and compact.

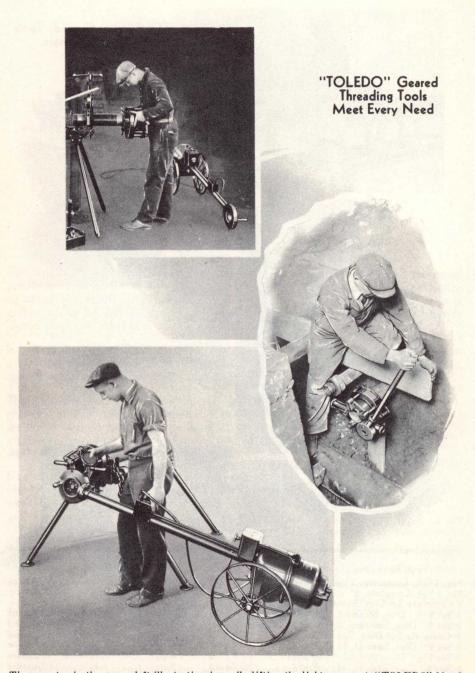
be confused with the regular tool that cuts standard pipe threads of 8 turns to the inch. In ordering it is necessary to state whether the standard pipe thread tool or the special oil well tubing tool is desired. Unless otherwise specified the 8-pitch or standard thread tool will be shipped.

The complete outfit consists of the tool body; a twopiece handle; dies for each size within its capacity; necessary bushing or bushings; a set screw wrench; and an instruction card; all packed in wood box.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 11/2R. Complete, 21/211, 311, Star	ndard 8th\$45.00	37 lbs.	45 lbs.	Abash
No. 1½R, Complete, 2½", 3", Star No. 1½R, Complete, 2" to 3", Speci	al 111/2th 50.00	39 lbs.	47 lbs.	Abase
1 Complete Set Dies, Standard, 8 thre	ad 8.00	1 lb.	2 lbs.	Air
1 Set 21/211 Dies, Standard, 8 thread.		9 oz.	1 16.	Absurd
1 Set 3" Dies, Standard, 8 thread	4.00	7 oz.	1 lb.	Abundant
1 Complete Set Dies, Special, 111/2	thread 12.00	11/2 lbs.	2 lbs.	Abstruse
1 Set 2" Dies, Special, 111/2 thread.		10 oz.	1 lb.	Absolve
1 Set 21/2" Dies, Special, 111/2 threa		9 oz.	1 lb.	Abstain
1 Set 3" Dies, Special, 111/2 thread.	4.00	7 oz.	1 lb.	Abstinent

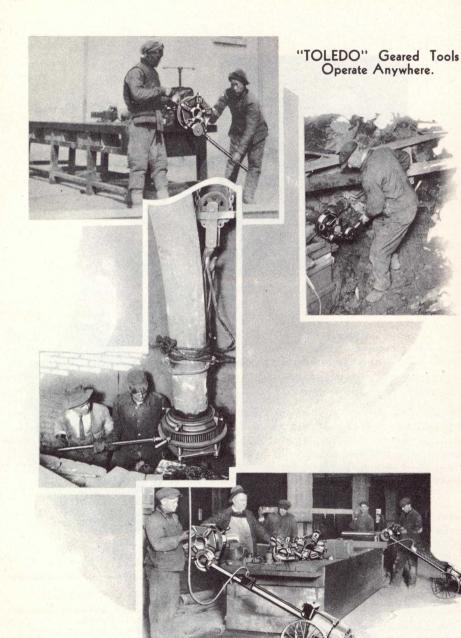
Complete list of repair parts for No. 1½R Tool on page 66. Tools other than above will be quoted on specially as occasion arises.





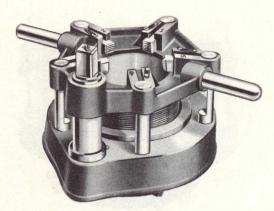
The operator in the upper left illustration is easily lifting the light, compact, "TOLEDO" No. 2 Tool from the completed thread. In the right center he is threading 4" pipe down in the trench with a No. 2 Tool, and in the lower left a No. 2 is operated by a "TOLEDO" Power Drive making it a highly efficient power machine.





Even Chinese Coolies, in the upper left hand illustration, readily understand the correct operation of a "TOLEDO". At the right, the operator is cutting a 4" thread in a close corner with a "TOLEDO" No. 2. In the center, a 10' Steam Header is being threaded upside down, and right in position with a "TOLEDO" No. 4. The lower illustration shows "TOLEDO" geared tools operated by "TOLEDO" Power Drives on a big New York contract.





"Toledo" Geared Adjustable Threading Device No. 2

CAPACITY 21/2" to 4" PIPE, INCLUSIVE

This model probably, more than any other tool we make, has established the reputation of "TOLEDO" tools as being the most practical, most durable, most easily operated and satisfactory threading device in use today. Its net weight, as it is picked up to be put on the pipe, is but 57 pounds. It is nearly thirty pounds lighter than any other tool of this capacity.

It utilizes the "TOLEDO" receding die principle, described on page 5, and even a boy can thread pipe with it and handle it easily. It can be put on the pipe in most any place or position and a perfect tapered thread produced.

The complete tool consists of the tool body, complete set of  $2^{1}/2^{11}$  to  $4^{11}$  right hand dies and bushings, set screw wrench, an instruction card, all packed in a wooden box, and a ratchet handle shipped separately.

It can also be furnished on special order for producing straight, running conduit threads for electrical work. Quotation on request.

The productive capacity of the No. 2 can be increased many times by operating it with a "TO-LEDO" Power Drive, described on pages 34 to 38 inclusive.

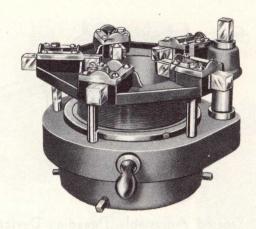


It is light and easy for man or boy to handle. The lightest 2½' to 4" pipe threader.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 2, Complete, 21/2" to 4"	\$100.00	84 lbs.	95 lbs.	Abate
1 Complete Set Dies, 21/2" to 4"	32.00	71/2 lbs.	8 lbs.	Action
1 Set 21/211 Dies	8.00	21/8 lbs.	3 lbs.	Abuse
1 Set 31 Dies	8.00	2 lbs.	3 lbs.	Accord
1 Set 31/2" Dies	8.00	13/4 lbs.	2 lbs.	Acme
1 Set 4" Dies	8.00	15/8 ibs.	2 lbs.	Acorn

Complete list of repair parts for No. 2 Tool on page 67. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





### "Toledo" Geared Adjustable Threading Device No. 25

CAPACITY 21/2" to 6" PIPE, INCLUSIVE

This tool differs from other "TOLEDO" geared devices, as it threads the seven sizes of pipe within its capacity with one set of dies.

The adjusting from one size to another is positive, and is accomplished by pulling back out of the way a pawl in each die holder, and then pushing in or out each die holder until same registers for the size it is desired to thread. (See the illustration below).

It utilizes the "TOLEDO" receding die principle, and threads pipe very easily. An extra set of dies is furnished, so that when one set becomes dull and needs to be resharpened, there will be a sharp set on hand to take its place.

> Special long-barreled bushings are furnished with this tool, making it very easy to center on the pipe.

> The complete tool consists of the tool body, two sets of dies, complete set of bushings, set screw wrench, and instruction card, all packed in a wood box, and a ratchet handle shipped separately.

> The productive capacity of this tool can be increased many times by operating it with a "TOLEDO" Power Drive, described on pages 34 to 38 inclusive.

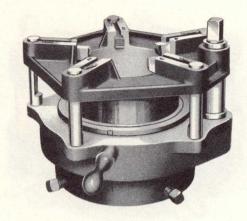


Dies are changed instantly, positively in the "TOLEDO" No. 25.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 25, Complete, 21/2" to 6"	\$230.00	200 lbs.	226 lbs.	Hamlet
No. 25, Complete, 2½'' to 6''	8.00	8 oz.	1 lb.	Hemp

Complete list of repair parts for No. 25 Tool on page 68. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





# "Toledo" Geared Adjustable Threading Device No. 21/2 CAPACITY 41/2" to 6" PIPE, INCLUSIVE

This tool has been developed primarily for those who already own a No. 2 tool and find it necessary to thread up to 6" pipe. It possesses all the desirable qualities of the No. 2, No. 3 and No. 4 models, being of

the same general character as these tools.

It utilizes a separate set of dies for each size pipe, and will cut perfect threads on either wrought iron or steel pipe.

One man can easily operate the tool on any size within its capacity. It utilizes the same dies as the No. 3 described on the following page.

Special 411 dies and 411 bushing may be furnished on special order.

It is the lightest 6" threader made and weighs but 136 pounds as it is picked up to be put on the pipe. Like the No. 25 it is equipped with special long barreled bushings, to facilitate centering the tool on the pipe. The complete tool consists of tool body, complete set of  $4\frac{1}{2}$ " to 6" right hand dies, bushings, set screw wrench, an instruction card, all packed in a wood box, and a ratchet handle shipped separately.

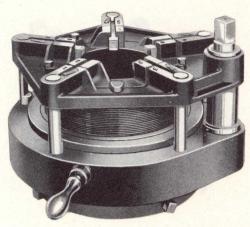


All "TOLEDO" Geared tools have driving pinions with oil reservoir assuring positive lubrication.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 21/2, Complete, 41/2" to 6"	\$200.00	155 lbs.	187 lbs.	Conjure
1 Complete Set Dies, 41/2" to 6".	36.00	11½ lbs.	12 lbs.	Connive
1 Set 41/2" Dies	12.00	41/8 lbs.	5 lbs.	Adapt
1 Set 5" Dies	12.00	4 lbs.	5 lbs.	Adequate
1 Set 6" Dies	12.00	31/2 lbs	4 lbs.	Adhere

Complete list of repair parts for No. 2½ Tool on page 69. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





"Toledo" Geared Adjustable Threading Device No. 3
CAPACITY 41/2" to 8" PIPE, INCLUSIVE

This tool utilizes a separate set of dies for each size pipe, and like the other sizes of "TOLEDO" tools of the same pattern is the most popular tool of its capacity in use today.

Its net weight as it is picked up to be put on the pipe is but 148 pounds.



The strong, accurately cut gears are all covered in "TOLEDO" tools.

With clearance in other directions it may be operated on a pipe the center of which is within 10<sup>11</sup> of a wall or other obstruction. One man can readily cut an 8<sup>11</sup> thread with it and do the work without loss of time.

The complete tool consists of the tool body, complete set of  $4^{1}/_{2}{}^{1}$  to  $8^{11}$  right hand dies, bushings, set screw wrench, an instruction card, all packed in a wood box, and a ratchet handle which is shipped separately.

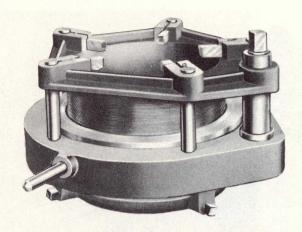
Special 4" dies and 4" bushing may be furnished for this tool when required, on special order.

The productive capacity of this tool can be increased many times by operating it with a "TOLEDO" Power Drive described on pages 34 to 38 inclusive.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 3, Complete, 4½'' to 8'' 1 Complete Set Dies, 4½'' to 8'' 1 Set 4½'' Dies 1 Set 5'' Dies 1 Set 6'' Dies	60.00 12.00 12.00	215 lbs. 16½ lbs. 4 lbs. 3¾ lbs. 3½ lbs.	226 lbs. 20 lbs. 5 lbs. 5 lbs. 4 lbs.	Abbey Assured Adapt Adequate Adhere
1 Set 7" Dies		3 lbs. 2½ lbs.	4 lbs. 3 lbs.	Advance Afflict

Complete list of repair parts for No. 3 Tool on page 70. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





"Toledo" Geared Adjustable Threading Device No. 4
CAPACITY 9" to 12" PIPE, INCLUSIVE

This is the largest "TOLEDO" pipe threading tool, and is remarkable in that it is perfectly practical for one man to cut a 12" thread by hand with same.

Special 8" dies and 8" bushing can be furnished on order when required.

In addition to the threading dies it is also furnished with a set each of 10<sup>11</sup> and 12<sup>11</sup> plain milling dies, furnished for the purpose of truing up the pipe before threading it.

Considering its size, this tool is extremely light, and as it is picked up to be put on the pipe its net weight is but 278 pounds.

The complete tool consists of tool body, complete set 9" to 12" right hand dies, 10" and 12" milling dies, bushings, set screw wrench, and instruction card, all packed in a wood box, and a ratchet handle which is shipped separately.

The productive capacity of this tool can be increased many times by operating it with a "TOLEDO" Power Drive, described on pages 34 to 38 inclusive.



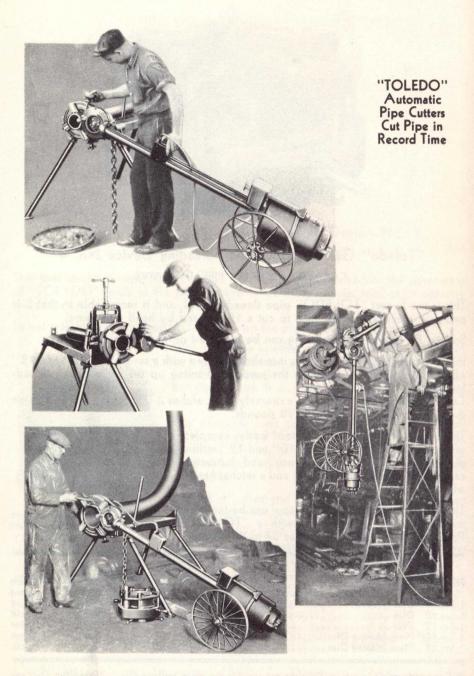
The 10" and 12" milling dies true up the pipe assuring perfect threads.

Tool, Extra Dies	List Price	Net Wt.	Ship. Wt.	Code
No. 4, Complete, 9" to 12"	\$500.00	329 lbs.	373 lbs.	Abbott
*1 Complete Set Dies, 9" to 12"	60.00	10 lbs.	13 lbs.	Agent
1 Set 9" Dies		4 lbs.	5 lbs.	Afford
1 Set 10" Dies	20.00	31/2 lbs.	4 lbs.	Afraid
1 Set 12" Dies		21/2 lbs.	3 lbs.	After
1 Set 10" Plain Milling Dies		31/2 lbs.	4 lbs.	Against
1 Set 12" Plain Milling Dies		21/2 lbs.	3 lbs.	Agate

<sup>\*&</sup>quot;1 complete set Dies" as quoted does not include the plain milling dies. If Milling Dies are wanted they must be ordered specially.

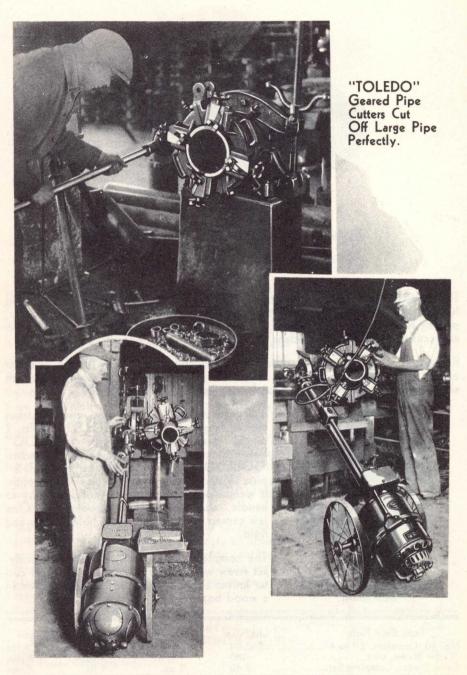
Complete list of repair parts for No. 4 Tool on page 71. Prices apply for American standard tools only, other tools will be quoted on specially as occasion arises.





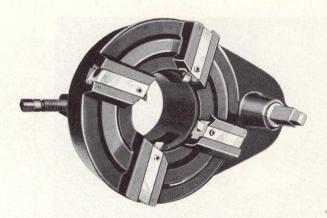
The operator in the upper left illustration is cutting off 4½" pipe with a "TOLEDO" No. 80 Automatic in 2 minutes, when using a power drive. Below he is operating the No. 80 by hand with a Ratchet Handle. At the right, a No. 40 Automatic is cutting line shafting with a Power Drive suspended in air. At the bottom the No. 80 Automatic is cutting off an 8" bend.





A "TOLEDO" Geared Pipe Cutter in the upper left corner is finishing cutting off 8" pipe by hand. Note the clean cut. In the two lower illustrations, "TOLEDO" Power Drives are operating "TOLEDO" Geared Pipe Cutters. An excellent combination for efficiency.





"Toledo" Automatic Pipe Cutter No. 40

CAPACITY 2" to 4" PIPE, INCLUSIVE

This tool is a most remarkable pipe and conduit cutter. It cuts very rapidly and leaves a straight, square-end cut without burr, and it neatly chamfers the outer edge, making it very easy to center and start the threading dies on the pipe. It is also an excellent cutter for electricians, because of the clean, smooth, cut produced.

Knives are fed automatically, requiring no attention on the part of the operator except to see that they are kept sharp. A single hand-wheel given a part turn sets the knives for cutting, or the quick return after the pipe is cut off.



A part turn of the hand-wheel sets the knives for cutting or their return.

It is operated either with the regular ratchet handle furnished with the "TOLEDO" No. 2 or 25 threading tools or the "TOLEDO" Power Drive. When operated by the Standard "TOLEDO" Power Drive it will cut off 2" pipe in 20 seconds, and 4" pipe in 65 seconds. It weighs only 70 pounds, is compact, easy to handle, and very simple to operate. One jaw centers it on the pipe and holds it true and rigid.

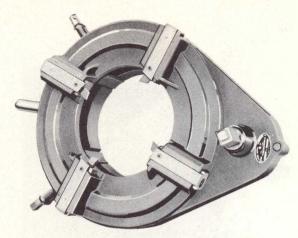
The complete outfit consists of the tool body, set screw wrench, bushings, an extra set of cutter knives and an instruction card, all packed in a wood box.

Tool, Extra Parts	List Price	Net Wt.	Ship. Wt.	Code
No. 40, Complete, 2" to 4"	.\$60.00	70 lbs.	86 lbs.	Auto
*Cutter Blades, each	60	11/4 oz.	4 oz.	Avian
Cutter Blades, Complete Set	. 2.40	5 oz.	1 lb.	Avon

<sup>\*</sup>When ordering single blades the remaining blades of the set must be returned to the factory to insure the new blades being properly matched in.

Complete list of repair parts for No. 40 Pipe Cutter on Page 72.





"Toledo" Automatic Pipe Cutter No. 80

CAPACITY 41/2" to 8" PIPE, INCLUSIVE

This pipe cutter is an excellent companion tool for the No. 3 Threading Device. It is similar to the No. 40 except larger and equipped with two set screws for centering the tool on the pipe.

It cuts off large pipe very rapidly and perfectly and provides the most efficient means for doing this work.

Knives are fed automatically. A hand wheel sets them for cutting or at the completion of the cut a turn in the opposite direction and the knives are quickly returned to their original position.

This cutter is operated either with the regular ratchet handle furnished with the No. 3 and No. 4 Threading tools or the "TOLEDO" Power Drive. When operated by the Standard Drive it will cut off  $4^{1/2}$ " pipe in  $1^{1/2}$  minutes and  $8^{11}$  pipe in 2 minutes.

It weighs only 134 lbs. as it is picked up to be put on the pipe, is strictly portable and easy to operate. Complete outfit consists of tool body, set screw wrench, bushings, two sets of cutter blocks, an extra set of cutter knives and an instruction card, all packed in a wood box.



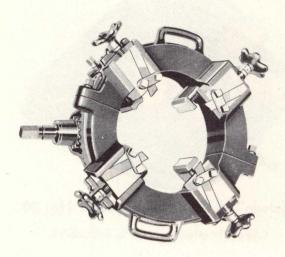
An actual photograph, not retouched, of pipe cut off with a "TOLEDO." Note the smooth, square end, cut without burr.

Tool, Extra Parts L	ist Price	Net Wt.	Ship. Wt.	Code
No. 80, Complete, 41/211 to 811	\$150.00	173 lbs.	191 lbs.	Alien
*Cutter Blades, each	.75	2 oz.	4 oz.	Alley
Cutter Blades, Complete Set	3.00	8 oz.	1 lb.	Alva

<sup>\*</sup>When ordering single blades the remaining blades of the set must be returned to the factory to insure the new blades being properly matched in.

Complete list of repair parts for No. 80 Pipe Cutter on Page 72.





### "Toledo" Geared Pipe Cutters

No. 250—CAPACITY 21/2" to 6" PIPE, INCLUSIVE

No. 300—CAPACITY 41/2" to 8" PIPE, INCLUSIVE No. 350—CAPACITY 7" to 10" PIPE, INCLUSIVE

No. 400—CAPACITY 9" to 12" PIPE, INCLUSIVE

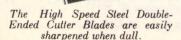
These tools cut off large pipe quickly, accurately, leaving a straight, square-end cut without burr.

The chuck jaws are case hardened with micrometer marks, making it easy to center the tools on the pipe. No bushings are necessary. The frame castings are made in two pieces so the tool can be clamped around pipe already installed in a line and the work performed.

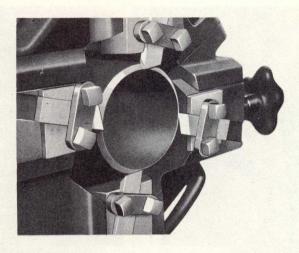
When cutting off pipe while the cutter frame is rotating, either by means of the

ratchet handle or a "TOLEDO" Power Drive, the knives are fed into the pipe by hand, the operator giving the hand feed wheel a part turn at each revolution.

The knives are made of High Speed Steel carefully tempered and double-ended. They may be reground many times as they become dull. The driving pinion has an oil reservoir assuring proper lubrication.







Special cutter blades for cutting a  $45^{\circ}$  bevel with a narrow shoulder on the end of the pipe can be furnished on special order. These special bevel cutter knives with the necessary adapters and cutter clamp screws are illustrated above in operation, showing the clean cut, perfectly bevelled end.

These geared pipe cutters with the special knives will enable you to cut off and bevel large pipe most economically and in the shortest possible time. They cut off

Pipe is cut off and bevelled perfectly with the special 45° blades.

large pipe easily and perfectly and assure the cut being square with the axis of the pipe, thus making for more rapid and accurate installation.

The complete tool consists of the tool body, cutter knives, set screw wrench and instruction card, all packed in a wood box, and the ratchet handle shipped separately.

The productive capacity of these cutters can be increased many times by operating them by the "TOLEDO" Power Drives described on pages 34 to 38 inclusive.

Tool, Extra Parts	List Price	Net Wt.	Ship. Wt.	Code
No. 250, Complete, 21/211 to 611	.\$ 80.00	98 lbs.	121 lbs.	Hay
No. 300, Complete, 41/2" to 8"		125 lbs.	162 lbs.	Harem
No. 350, Complete, 71 to 101		150 lbs.	178 lbs.	Hake
No. 400, Complete, 911 to 1211	. 150.00	175 lbs.	211 lbs.	Harvest
*Cutter Blades, Each	80	1 oz.	4 oz.	Haven
Cutter Blades, Complete Set	. 3.20	4 oz.	1 lb.	Havoc
1 Set of (4) Special Bevelled Cutter Blade	s 10.00	14 oz.	1 lb.	
1 Set of (2) Adapters	. 10.00	11 oz.	1 lb.	
1 Set of (8) Cutter Clamp Screws	. 1.60	12 oz.	1 lb.	

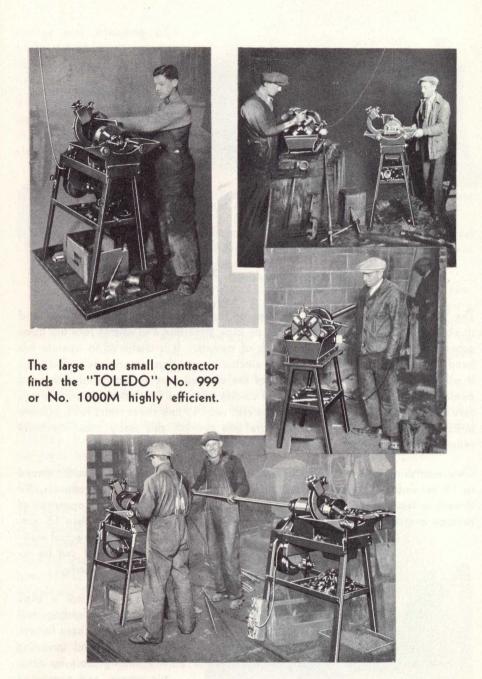
<sup>\*</sup>When ordering single blades always specify whether "Straight or Bevel" edge required. Complete list of repair parts for "TOLEDO" Geared Pipe Cutters on page 73.





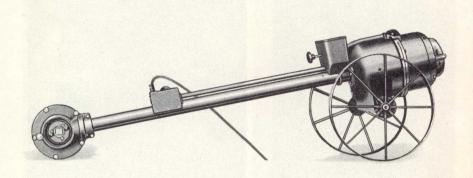
In the upper left a "TOLEDO" Power Drive is turning sheet metal rolls, and in the upper right operating a "TOLEDO" No. 3 threading 5". In the center the operator is taking it easy threading 12" pipe. The two operators in the lower left are making speed with "TOLEDO" equipment on a big contract, and in the lower right, the Drive is operating a winch hauling dirt from an excavation.





The boy in upper left illustration is operating a "TOLEDO" No. 1000M in Quebec. The No. 999 and the No. 1000M in the upper right are completing a New York Apartment contract in record time. Even the smaller plumber finds a No. 999 a great time and labor saver as shown in the center and below a larger contractor is shown with the two No. 1000M machines in his shop.





#### "Toledo" Standard Power Drive

The "TOLEDO" Power Drive has been on the market for a number of years, and its ability to save both time and labor on pipe threading and cutting jobs has been proven to the satisfaction of thousands of owners. It is designed to operate our hand threading and cutting devices by electricity, and thus increase their efficiency. It will save approximately four-fifths of the elapsed time as compared with hand operation on a pipe threading or pipe cutting job, and very often in addition will save an extra man's time entirely. It is also used to turn sheet metal rolls, operate hoisting winches to pull electric cable thru conduit and many other machines requiring hand cranking methods of operation.

One man using a Power Drive operating "TOLEDO" tools can cut a 2" thread in 18 seconds, 4" threads in less than 2 minutes, 6" threads in 3 minutes, 8" threads in less than 4 minutes, and 12" threads, including the double operation of running over the pipe with blank dies to true up the surface, in less than 15 min-



Large contractors depend on their "TOLEDO" drives to reduce costs.

utes. These are actual working figures and can be reproduced regularly.

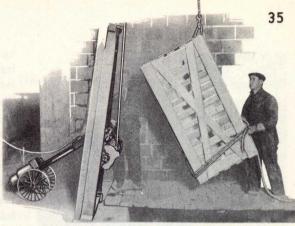
The Drive is not a pipe cutting or threading machine, it is a means for operating our hand threading and cutting tools by electric power, and connected to "TOLEDO" tools it makes a most efficient and desirable equipment for



cutting and threading pipe. Light, portable, strong, easy to operate and fast, it has no rival.

It consists of a specially designed electric motor, mounted in a housing which also encloses a transmission gearing,

communicating with a driving shaft extending to the operating end of



A "TOLEDO" drive operating a winch to raise bath tubs and supplies to the upper floors of an apartment job.

the shaft housing, the whole mechanism being mounted on iron wheels, thus providing for easy movement from place to place.

The motors used in the regular model Drives can be supplied for A. C.  $1\frac{1}{2}$  H. P. or for D. C. 1 H. P. They are much more powerful than the household type of motor and require more current. They should not, therefore, be connected to a lamp socket of the ordinary household system.

Is easily moved about.

Twenty feet of flexible cable is supplied with each Drive, and this should be wired into the power lines in the building where the Drive is to be used, or into the main leads of the lighting circuit at some one of the distributing cabinets in the

building. If necessary to add wire to the cable furnished with the Drive, we recommend the use of No. 8 wire.

The length of the Drive over all is approximately 6 feet. The net weight varies from 230 to 273 pounds, and the shipping weight from 318 to 363 pounds. The iron wheels are 1811 in diameter.

Enclosed in the motor housing is a two speed transmission gearing, which is controlled by a rod and knob projecting through the fuse box.

Mounted on the shaft housing, just above the motor, is a fuse box



Many "TOLEDO" Drives are used in the coal fields where time and labor saving is a factor.





The "Drive" operating a hoisting winch on a large factory construction job.

containing two specially designed fuse plugs, which will permit of intermittent overloads but will "blow" should any overload become dangerous to the life of the motor. These fuse plugs can be renewed by the insertion of new fusible links, an extra pair of which is supplied with each outfit. Mounted midway on the shaft housing is the switch box, to which the flexible cable is connected by a plug connector. The switch is of a special toggle joint type.

The driving head is furnished

with two driving bushings to fit the two sizes of pinions used on the various "TOLEDO" tools. At slow speed it rotates at 38 R.P.M. and on high speed at 57 R.P.M. We specialize on 60 cycle, single phase, A.C. motors for 220-110 volt current, and on 220 volt D.C. motors, or 110 volt D.C. motors. Drives can be supplied from

The special yoke and handles for operating a "TOLEDO" No. 1 tool.

stock equipped with any one of these motors.

We can also make up a Drive furnished with three-phase motors, or for higher voltages or different cycles, and will be glad to quote prices.

A yoke and pair of short handles can be furnished on special order, to permit of the operation of "TOLEDO" No. 1 tools by the Power Drive.



A Power Drive and a "TOLEDO" cutter cuts off large pipe in record time.

Standard Power Drives, Special Attachment.			
List Price	Net Wt.	Ship Wt.	Code
With A.C. Motor, 60 Cycle, S.P\$600.00	230 lbs.	318 lbs.	Lard
With A.C. Motor, 50 Cycle, S.P 600.00	230 lbs.	318 lbs.	Ladder
With A.C. Motor, 40 Cycle, S.P 700.00	273 lbs.	350 lbs.	Lather
With A.C. Motor, 30 Cycle, S.P 700.00	273 lbs.	350 lbs.	Lance
With A.C. Motor, 25 Cycle, S.P 700.00	273 lbs.	350 lbs.	Loaf
With D.C. Motor	273 lbs.	363 lbs.	Lint
*110 Volt add Code Word *220 Volt add Code Word			Despond Bouyant
Special Attachment for No. 1 Tool 5.00	5 lbs.	6 lbs.	Library

\*When ordering standard drive always specify voltage.

Complete list of repair parts for standard power drives on page 75.



#### "Toledo" Universal Power Drive

THE "TOLEDO" UNIVERSAL Power Drive is equipped with a ½ H.P. universal motor which will operate from a light socket on any 110 volt current. This Drive unlike the other models, has a reversible motor and after the thread is cut, the operator backs the dies off the completed thread simply by a turn of the switch which is conveniently located near the driving head.

The motor automatically adjusts speed to load, increasing power and decreasing speed as required on heavy loads and increasing speed on light loads. It thus backs the dies off rapidly and without loss of time, and always assures maximum efficiency. It is powerful and assures the operator long and satisfactory service. Its operating cost is very low.

This UNIVERSAL Drive weighs only 165 pounds, is strongly built, and will give years of satisfactory service. Like the other "TO-LEDO" Drives, it is simple in construction, easy to operate. While it will operate "TO-LEDO" tools for cutting and threading pipe up to and including 12" and will pay for itself in a short time by the time and

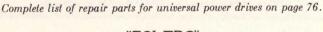


The Universal Power Drive weighs less than other model drives but is very strong, sturdy and powerful.

labor it will save. Yet the Universal Drive is not as powerful, fast or efficient as the Standard or Super Models, shown on the preceding and following pages, respectively.

When used with the Power Drive Helper, described on pages 40 and 41, operating "TOLEDO" tools it makes efficient equipment for cutting and threading  $\frac{1}{4}$ " to 2" pipe.

"Universal" Power-Drive	List Price	Net Wt.	Ship. Wt.	Code
"Universal" with ½ H.P. Motor, to operate on any 110 Volt Current	.\$500.00	165 lbs.	238 lbs.	Log





### "Toledo" Super Power Drive



While the Super Power Drive is the most powerful, yet it may be easily moved about on its strong iron wheels.

The "TOLEDO" Super Power Drive is similar in appearance to the "TO-LEDO" Standard Drive but is slightly larger. It is the most powerful, rapid and efficient of all "TOLEDO" Drives.

When operating a "TOLEDO" No. 3 tool it threads  $4\frac{1}{2}$ " pipe in 2 minutes and 8" pipe in less than 3 minutes. Operating a No. 80 Cutter,  $4\frac{1}{2}$ " is cut off in 45 seconds and 8" in 50 seconds.

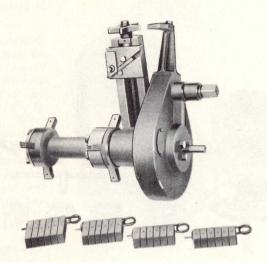
The Drive is furnished with 2½ H. P. 3-phase A. C. motor only, either 220 or 440 volts. It is controlled by a specially designed switch conveniently located on the drive shaft casing. Specially designed fuse plugs protect the motor from damage.

The driving head rotates at 57 R.P.M. low speed and 97 R.P.M. at high speed. The Super Power

Drive weighs 278 lbs. and is powerfully built. It is easily moved about on strong iron wheels and provides the most rapid and efficient means for operating the large "TOLEDO" Geared Pipe Threading and Cutting Tools. It is not practical to use with the smaller tools because of its high speed.

"Super" Power-Drive	List Price	Net Wt.	Ship. Wt.	Code
"SUPER" with 21/2 H.P. Motor	\$750.00	278 lbs.	396 lbs.	Lumber





# "Toledo" Flange Facing Device CAPACITY 41/2" to 8" FLANGES, INCLUSIVE

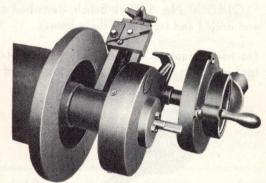
This device is operated by a power drive and is used for refacing pipe flanges after they have been made up on the pipe and also vanstone joints, in order to assure the face of the flange being at true right angles with the length of the pipe. Flanges on long lengths of pipe and bends can be readily machined with this device.

The work is done easier and more quickly than in an expensive lathe and con-

tractors handling this class of work will find that one of these machines will soon pay for itself.

The device is accurately centered and rigidly held by the turn of one set screw. It is easily handled by one man. The cutter knife is fed automatically and when dull may be readily resharpened.

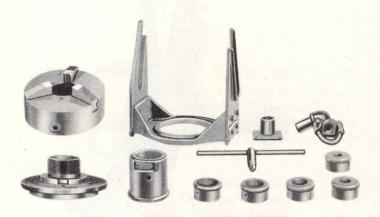
The complete device consists of the tool and complete set of jaws for the various sizes of pipe, all packed in a wood box.



The Flange Facing Device mounted, with driving head of power drive attached ready to start facing off an 8" flange.

Flange Facing Device	List Price	Net Wt.	Ship. Wt.	Code
Flange Facing Device, Complete to 8"	\$500.00	84 lbs.	104 lbs.	Flood



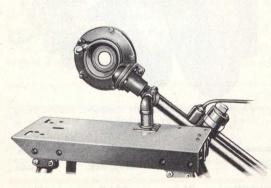


# "Toledo" Power Drive Helper

This equipment is for use with "TOLEDO" Power Drives and "TOLEDO" tools and with them make a very efficient combination.

The Helper includes a pipe saddle and other fittings by which the Power Drive is secured to any bench or post as illustrated. We recommend the use of the "TOLEDO" No. 5 Work Bench, described on page 53 as it is very strong, rigid, and drilled and tapped for these fittings.

No vise is required. The chuck holds and rotates the pipe, the cutting or threading tool is put on the pipe, the current is turned on and the pipe quickly cut off or



A clamp is furnished with each Helper to hold the Power Drive to the bench.

threaded. A turn of the switch, the motor is reversed and the dies are quickly backed off the completed thread. No effort and no loss of time. There is no danger of injury to operator, as the pipe revolves and the tool is stationary. With "TOLEDO" tools this equipment will thread ½" pipe in 20 seconds, 1" in 30 seconds and 2" in 36 seconds, including backing the dies off the completed thread.



It permits the use of the Vosper Pipe Cutter or any roller cutter for cutting off pipe.

The Helper can be furnished for operating with the "TOLEDO" Standard Power Drive or the Universal Power Drive and when ordering specify for which type drive. When used with a Standard Drive, it is necessary for the operator to back the dies off the completed thread by hand but with the Universal Drive having the reverse, they are backed off by power.

The complete outfit consists of the chuck, collar, yoke, bushings, chuck wrench and fittings to fas-



The P. D. Helper is quickly and easily assembled in the Power Drive.

ten Power Drive to bench and pipe support for holding long lengths of pipe; all packed in two wood boxes.

When ordering be sure to specify whether for standard or universal power drive.

Special Die Heads, as illustrated, for threading  $1^{11}$ ,  $1^{11}$ ,  $1^{11}$ ,  $1^{11}$  and  $2^{11}$  pipe can also be furnished for use with the Helper. When these are used there are no dies to change, as each head threads one size only, and the greatest possible speed is



The P. D. Helper Mounted and showing position of Threading Tool.

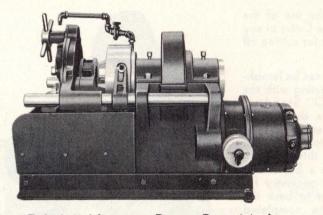
assured. 1" pipe can be threaded in 30 seconds; 2" pipe in 35 seconds with these special die heads operated by a "TOLEDO" Universal Power Drive.



The Special Die Heads permit instant change of sizes.

Power Drive Helper, Special Heads L	st Price	Net Wt.	Ship. Wt.	Code
P.D. Helper, Complete with Pipe Support .\$	120.00	86 lbs.	112 lbs.	Help
1" or 11/4" Die Head, and Cover, Less Dies	4.40	21/2 lbs.	3 lbs.	
1½" Die Head and Cover, Less Dies 2" Die Head and Cover, Less Dies	4.80	2½ lbs.	3 lbs.	
1 Set 1" or 11/4" R. H. Dies, only	5.00 4.00	31/4 lbs. 4 oz.	4 lbs. 1 lb.	
1 Set 11/2" or 2" R.H. Dies, only	5.00	4 oz.	1 lb.	





"Toledo" No. 999 Power Pipe Machine

CAPACITY 1/2" to 2" PIPE, INCLUSIVE

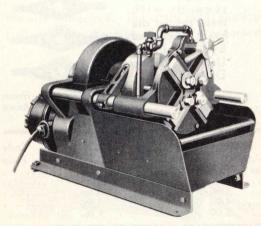
Also 1/4" and 3/8" Pipe, and 1/4" to 1" Bolt Dies if specially ordered.

Also 1/2" to 2" Left Hand Die Heads and Dies on special order.

This machine is the ideal small, compact, portable, power pipe machine for cutting and threading  $\frac{1}{2}$ " to 2" pipe.

It combines all essentials for a practical, popular pipe machine for either shop or job use or industrial plants.

It is equipped with a  $\frac{1}{2}$  H. P. ball-bearing, Universal motor that operates from a lamp socket on any 110 volt current. The motor automatically adjusts itself to load and is very powerful. There are no gear shifting levers as all control is centralized in the motor switch, which is conveniently located.

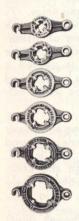


Built-in oil pump is positive in action and assures ample flow.

The centrifugal type oil pump is built into the machine and direct driven from the motor, it is simple in construction, has no release or overflow valves, and assures ample and constant flow of oil at all times.

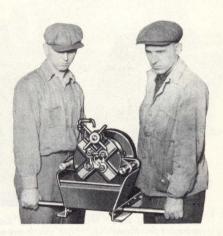
Separate die heads for each size. This method permits hobbing or machining the dies with utmost accuracy and precision for each size pipe, assuring the proper clearance and helix angle and perfect standard threads, even with inexperienced operators. Die heads mounted on two posts, per-





Separate die heads assure quick change and standard threads.

mitting instant change from one size to another or turning the head back out of the way. No moving parts to become worn or to be replaced. No loss of time. No rack on ways to become clogged with dirt or chips. Nipples as short as 31/4" can be cut on the 2" size and even shorter than this on the smaller sizes. 1/2" nipples as short as 13/411. Brass pipe is threaded perfectly with regular die heads and dies.

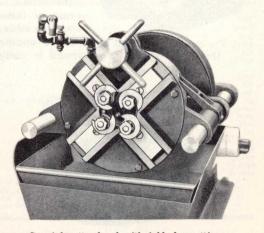


Two men can easily carry the No. 999 pipe machine anywhere, even thru any ordinary door.

Complete set of 1/2" to

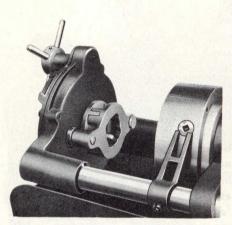
2" right-hand dies furnished with each machine.  $\frac{1}{2}$ " and  $\frac{3}{4}$ " made from special Carbon Alloy Steel and 1" to 2" made from High Speed Steel, carefully hardened and tempered, of the usual high standard of "TOLEDO" quality. Comparatively inexpensive, assuring maximum service at minimum expense. Easily removed from heads and reground many times as they become dull. Segmental dies provide greater chip clearance and easier oiling.

Bushings furnished for each size permit instant centering of pipe, but only necessary when cutting or threading pipe 6 ft. long or longer. The cutting head is of special design with 4 circular cutting blades all cutting simultaneously and producing a smooth, square-end cut without burr. Pipe is cut off very rapidly, 2" pipe is cut off in 14 seconds and smaller sizes in proportion. Blades fed by small hand wheel, permitting instant adjustment for various sizes. Double edged cutter blades may be turned over when one edge becomes dull



Special cutter head with 4 blades cutting simultaneously means high cutting speed.





Rear view of cutter head with 2" die head mounted for threading. Note chuck wrench ejector finger.

easily regulated by six cap screws.

and the sharp edges used, or may be easily removed and reground. Can be resharpened many times. A small gauge is furnished with each machine for easy setting of blades. Cutter Blades leave clean, square end cut. If reaming is desired a special pipe reamer can be furnished that will ream the pipe while cutting the thread.

The spindle is very strong and heavy with extra large, accurately ground bearings. All gears run in oil. Bearings are extra large and accurately fitted and oil grooved. Only 4 oil holes on machine.

Power is transmitted through direct gear drive and there are no chains or belts. The entire mechanism is protected by a safety friction gear,

The chuck is a heavy 3 jaw Universal type. Ejector fingers mounted on the supporting posts on both sides of the chuck will positively eject the chuck wrench if operator leaves wrench in the chuck and turns on the switch. No damage to wrench or machine. The chip pan is oversize and easily removed to empty the chips.

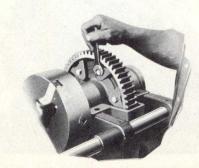


The switch controls all speeds. No levers.

This machine is light enough to be readily carried by two men and will easily pass thru any ordinary door. Its weight is properly distributed and the machine is perfectly balanced. It occupies a bench space 32" x 16", is only 20" high and is very sturdy in construction. Its production is unusually high because of instant change from cutting to threading and vice versa, quick change of die heads from one size to another, elimination of rear chucking and speed in cutting and threading. 2" pipe can be

easily cut off in 14 seconds and threaded in 30 seconds, and smaller sizes in proportion. Left hand threads can be produced with special left hand die heads and dies.

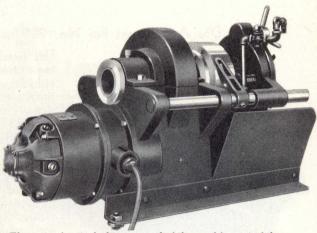
Machine is shipped assembled and ready for operation. It is furnished complete with ½" to 2" R. H. die heads and dies, bushings, complete set of 4 cutter blades, chuck wrench, cutter blade and friction gear wrench, 10 feet of heavily insulated rubber covered cable with connector and plug, and one gallon of thread cutting oil.



The Safety Friction Gear adjusted by tightening 6 cap screws under gear cover.



Additional equipment furnished on special order; Pipe Reamer, 1/4" and 3/8" die heads and dies for cutting standard pipe threads. Special dies for cutting straight running threads without taper or threads longer than Briggs standard. Also special steel stand, equipped with tool tray, for mounting machine and pipe support for holding long lengths of



The motor is attached to rear end of the machine out of the way.

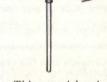
Note the strong and sturdy construction.

pipe. Special bolt threading attachment can also be furnished. It consists of a bolt rod holder which holds rods in sizes from  $\frac{1}{4}$ ! to  $\frac{7}{8}$ ! inclusive, stationary, and a small bolt die holder in which the bolt die is gripped while rotated in the chuck. A special 1! BOLT DIE Head and 1! bolt die can be furnished, but unlike



Left hand threads are cut with the special left hand die heads and dies.

the smaller sizes the 1" rod is held in the chuck and rotates. Special left hand die heads and left hand dies can be supplied for cutting left hand threads on  $\frac{1}{2}$ " to 2" pipe inclusive.



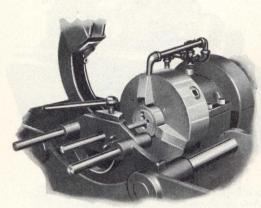
This special pipe reamer can be furnished when desired.

	DESCRIPTION OF THE PERSON NAMED IN	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN	Marie Control of the Control	Appendant to the second
Machine, extra parts List	t Price	Net Wt.	Ship. Wt.	Code
No. 999, complete 1/2" to 2" with 1/2 H. P. Universal Motor \$5.	50.00	296 lbs.	382 lbs.	Jewel
	40.00	71 lbs.	100 lbs.	Jog
	10.00	4 ½ lbs.	5 lbs.	Jasey
*Cutter Blade, each	3.00	2 oz.	1 lb.	Jib
	12.00	8 oz.	1 lb.	Jitney
Bushings, each	.70	1 1/2 lbs.	2 lbs.	
	17.00	4 1/2 lbs.	5 lbs.	Jerk
Bolt Dies, 1/4", 5/6", 3/8", 7/6", 1/9", 5/8", 3/4", 7/8" each	4.00	8 oz.	1 lb.	Jill
	20.00	3 lbs.	3 lbs.	Jabot
	26.60	15 1/2 lbs.	17 lbs.	Jig
1/2" Die Head and Cover, only, less dies	4.00	2 lbs.	2 lbs.	Jimp
3/11 Die Head and Cover, only, less dies	4.00	2 lbs.	2 lbs.	Jean
1" Die Head and Cover only, less dies	4.40	2 ½ lbs.	3 lbs.	Jess
1 1/4" Die Head and Cover only, less dies	4.40	2 ½ lbs.	3 lbs.	Jet
11/2" Die Head and Cover, only, less dies	4.80	3 1/4 lbs.	4 lbs.	Jowl
2" Die Head and Cover, only, less dies	5.00	3 1/2 lbs.	4 lbs.	Jug
1/4" Die Head and Cover, only, less dies	5.00	2 lbs.	2 lbs.	Junta
3/4" Die Head and Cover, only, less dies	5.00	2 lbs.	2 lbs.	Judge
	22.00	1 1/4 lbs.	2 lbs.	Alarm
1 Set 1/6" or 3/4" R. H. Carbon Steel Dies, only, per set	2.00	2 oz.	1 lb.	0
1 Set 1" to 11/4" R. H. High Speed Steel Dies, only, per set	4.00	4 oz.	1 lb.	0
1 Set 1 1/6" or 2" R. H. High Speed Steel Dies, only, per set	5.00	4 oz.	1 lb.	0
1 Set 14" or 38" R. H. Carbon Steel Dies, only, per set	2.00	2 oz.	1 lb.	0

<sup>\*</sup>When ordering single cutter blades always specify whether "straight" or "bevel" edge required. A complete set must comprise two "straight" and two "bevel" edge blades. Complete list of repair parts for No. 999 on page 78. oSee Code page 87 and 88.



### Bolt Die Attachment For No. 999 or No. 1000M



This attachment permits the threading of bolts, hanger rods, etc., with either the No. 999 or No. 1000M pipe machines. A specially designed holder as illustrated holds bolts or rods in sizes from \(^1/\_4\)! to \(^7/\_8\)! inclusive. The bolt dies are held in a bushing which is gripped in the chuck jaws and rotated while threading. The rod or bolt to be threaded remains stationary thus permitting the threading of rods of various shapes. Necessary wrenches are furnished with each attachment.

A special head fitted with 1" bolt

die, as illustrated, can also be furnished. This 1" bolt die head is used as regular threading die heads and the rod therefore is held in the chuck and rotated while the 1" bolt die is stationary.

Owners of No. 999 or No. 1000M pipe machines will find that this special bolt die equipment will enable them to make their own pipe hangers and rods of any sort and will soon pay for itself.

When ordering specify whether for No. 999 or No. 1000M pipe machine.

Complete Bolt Die attachment, only, No Dies	. List	Price	\$17.00
Bolt Dies 1/4", 5/6", 3/8", 7/6", 1/2", 5/8", 3/4", 7/8" each	. "	**	4.00
Bolt Dies 1/4", 5/6", 3/8", 7/6", 1/2", 5/8", 3/4", 7/8" each	. "	"	20.00

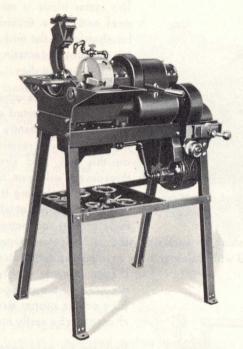
### Proper Thread Cutting Oil Is Essential

It is very important that the proper oil be used for threading pipe. This is particularly true when using power pipe machines. Tests show that the dies will last only a fraction of their normal life with improper oil and poor threads are frequently caused by its use.

Lard oil has long been recognized as most satisfactory for threading pipe. Pure lard oil however is very expensive and has a tendency to thicken in cold weather. Most of the oils sold as "Lard Oils" are adulterated, more or less. From exhaustive tests we have found that good black sulphur base oils are admirably adapted for threading pipe. They are comparatively low in price, do not thicken in cold weather and there are several good brands on the market.

In order to assure operators of "TOLEDO" power pipe machines using the proper oil and thus preventing excessive wear of dies and assist in making clean sharp threads, we furnish free with each No. 999 and No. 1000M machine a gallon of this oil. We will be glad to advise users of "TOLEDO" equipment where such oils can be secured. Operators should remember that the use of plenty of the proper oil is the best assurance for perfect threads and long life dies.





### "Toledo" No. 1000M Power Pipe Machine

CAPACITY 1/2" to 2" PIPE, INCLUSIVE

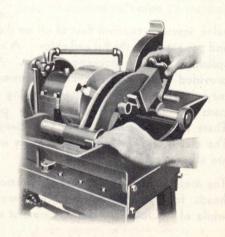
Also  $\frac{1}{4}$ " and  $\frac{3}{8}$ " Pipe, and  $\frac{1}{4}$ " to 1" Bolt Dies if specially ordered.

A fast, highly efficient, practical cutting, threading, and reaming machine for \(^1/2\)! to 2\'! pipe. It is relatively light, portable and compact, and very desirable for either shop or job.

The ½ H.P. motor may be operated from an ordinary light socket. It is furnished as required, either D. C. 110 Volt, A. C. 110 Volt, 60 cycle, or a 3-phase motor of any cycle or voltage. A Universal motor can also be furnished for 110 Volt D. C. or 110 Volt 25, 30, 40, 50 or 60 cycle A. C.

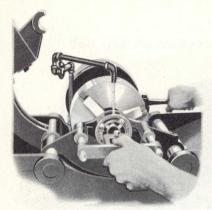
The pipe is gripped by a powerful selfcentering chuck and is rotated while being cut or threaded.

The cutting-off tool is mounted on a swinging arm which can be instantly placed in position for operation, or can be turned back out of the way.



This shows the arm with cutting knife down in position.





Here the arm with die head and reamer is down ready to start threading and reaming.

Die heads are changed instantly. Die head and reamer ready to be slipped on the

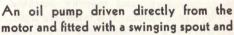
supporting posts.

The cutter blade is made of high speed steel and has a secondary cutting edge for chamfering the end of the pipe, assuring the proper centering and easy starting of the threading dies.

Likewise, from the other side, the threading dies are mounted on a swinging arm which can be instantly placed in operating position. A reaming tool is mounted on this arm, and simultaneously while threading it will ream out the inside edge of the pipe, clearing it of any roughness, which will be especially appreciated by the electrical contractor. There is a separate die head and bushing for each size pipe, and a feature peculiar to this machine

is the ease and speed with which one die head can be substituted for another. This change is made simply by slipping one die head off the supporting posts and slipping on the proper size die head. (The change can be easily made in 10 seconds.)

> Bushings are only necessary when cutting or threading pipe 6 feet long or longer. A pipe support for holding long lengths of pipe is furnished with each machine. It is rigid and does not need to be bolted to the floor.



valve, insures a constant flow of oil on the dies or cutting off tool. An oil strainer and pan separates the oil and chips. A chip pan with extra wide wings prevents oil

splashing or chips dropping on floor. A friction gear is provided which will slip under extreme overloads that may develop due to adverse operating conditions. All parts are therefore protected from possible damage. There is no exposed gearing to endanger the operator. The clutch and gear shifting levers as well as the switch are all conveniently located.

The dies can be easily and quickly removed from the die heads for resharpening or replacement. These dies, while of "TOLEDO" quality, are not expensive.

A large metal tray located beneath the machine provides a convenient place for the extra die heads, bushings,



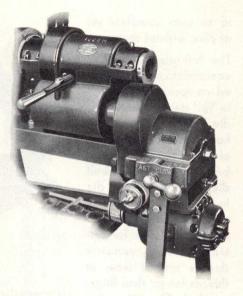
Die head and reamer in position.



chuck wrench, and tools.

The machine is portable as it weighs alone only 475 pounds. Another feature is the small amount of space it occupies as it measures 52" high, 25" wide and 32" long. It will easily pass through the ordinary door without disassembling. It will economically produce nipples  $3\frac{1}{2}$ " long or longer, on 2" pipe and nipples 3" long or longer on the smaller sizes.

A 2" pipe can be cut off and threaded, including chamfering and reaming in 80 seconds, and this time can be duplicated indefinitely. When cutting or threading  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1" or  $\frac{11}{4}$ " pipe the elapsed time can be greatly reduced because on these sizes the machine is operated at high speed, whereas for  $\frac{11}{6}$ " and  $\frac{9}{4}$ " pipe it is apposited



The clutch and gear levers as well as the switch are conveniently located.

as for  $1\frac{1}{2}$ " and 2" pipe it is operated at slow speed.

The following actual time tests can be reproduced regularly on this machine and will give some idea of its remarkable labor saving possibilities.

THREADING—1/2" pipe 13 seconds; 1" pipe 16 seconds; 2" pipe 30 seconds; (including backing dies off the completed thread.)

CUTTING OFF-1/2" pipe 8 seconds; 1" pipe 10 seconds; 2" pipe 15 seconds.

REAMING—Requires no additional time as the pipe is reamed at the same time the thread is cut.

The machine is shipped assembled and ready for operation. Furnished complete with 1/211 to 211 die heads and dies, bushings, cutting-off and chamfering tool, reamer, chuck wrench, friction gear wrench, 10 feet of cable with connectors, one gallon of thread cutting oil and pipe support.

A post card is also packed with each machine, which entitles the purchaser

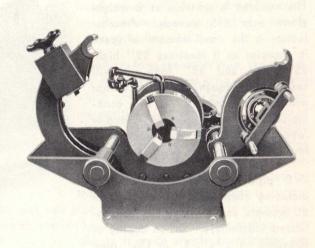


A pipe support for long lengths of pipe is furnished with each machine at no extra cost.



to an extra complete set of dies, without charge.

The following additional equipment can be furnished on special order, 1/411 to 7/811 standard bolt dies, die holders, and bolt rod holder, for producing bolts of any length, also 111 bolt die head and 1" bolt die; 1/4" and 3/8" die heads and dies for cutting standard pipe threads, and also special dies for cutting straight, running threads without taper or threads longer than Briggs standard. Quotations furnished on request.



Here both threading and cutting arms are tipped back, showing the strong, sturdy, non-slipping chuck and wide chip pans, which prevent oil splashing.

Machine, Extra Parts Lis	st Price	Net \	₩t.	Ship.	Wt.	Code
No. 1000M, with 1/2 H.P. Motor, complete 1/211						
to 2'' †\$	700.00			641 lbs		Sperm
Pipe Support	15.00	26	lbs.			Sate
Complete Bolt Die Attachment, only, no dies	17.00	41/2	lbs.	5 lbs		Chime
Bolt Dies, 1/4", 5/6", 38", 7/6", 1/2", 58", 3/4",						
'/e' each	4.00	8	oz.	1 16.		
Special 1" Bolt Die Head and 1" Bolt Die	20.00	3	lbs.	3 16	5.	Chirp
Cutter Blade, each	2.00	4	oz.	1 16		Keer
Reamer Blade, each	4.00	5	oz.	1 16		Kelp
Bushings, each	.70	11/2	lbs.	2 16	s.	
1 Complete Set 1/2" to 2" Die Heads and Covers,		, , ,				
only, less dies	26.60	151/2	lbs.	17 lb	s.	Chor
1/2" Die Head and Cover only, less dies	4.00	2	Ibs.	2 lb		Clain
3/4" Die Head and Cover only, less dies	4.00	2	lbs.	2 lb		Circu
1" Die Head and Cover only, less dies	4.40	21/2	lbs.	3 lb	s	Clay
11/4" Die Head and Cover only, less dies	4.40	21/2				Cloud
1½" Die Head and Cover only, less dies	4.80		lbs.			Clif
2" Die Head and Cover only, less dies	5.00		lbs.		100/1000	Clue
	5.00	2 2	lbs.			Chul
1/4" Die Head and Cover only, less dies	5.00	2	lbs.			Cuf
3/8" Die Head and Cover only, less dies	22.00		lbs.			Alarn
1 Complete Set 1/2" to 2" Dies only	22.00	1 7/4	103.	2 10		/ \\
1 Set 1/2" or 3/4" R. H. Carbon Steel Dies only,	2.00	2	-	1 lb		*
per set	2.00	-	OZ.	1 10		
1 Set 1" or 11/4" R. H. High Speed Steel Dies only,	4.00	4		1 lb		*
per set	4.00	4	OZ.	1 10	•	
1 Set 1½" or 2" R. H. High Speed Steel Dies only,	5.00	4		1 lb		*
per set	5.00	4	oz.	1 10	•	
1 Set 1/4" or 3/8" K. H. Carbon Steel Dies only,	0.00			1 lb		
per set	2.00	2	oz.	1 10		0

<sup>\*</sup>See code, pages 87 and 88. oSee code, page 86. †When ordering specify type of current to which motor is to be connected. Complete list of repair parts for No. 1000M on page 79.





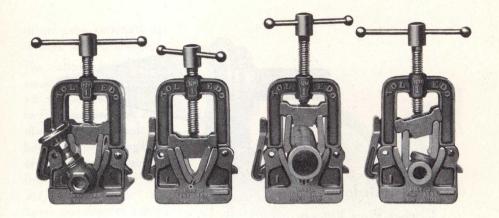


Note how easily the operator holds the hand grip of the "TOLEDO" ratchet reamer.

The hand grip is unique and provides an easy, natural position for holding the reamer.

The polished tubular handle is light in weight and unbreakable. The ratchet head is enclosed keeping the moving parts free from dirt, and being unusually large in diameter, assures longer life to the ratchet parts and eliminates handle wobble frequently found in other reamers. Parts that become worn may be easily replaced without purchasing a complete new tool.

Pipe Reamer List Price Net Wt. Ship. Wt. Code Ratchet Pipe Reamer, 3/811 to 311...... \$7.00 71/4 lbs. 8 lbs. Keel



### "Toledo" Malleable Pipe Vises

No. 1—CAPACITY 1/8" to 21/2" PIPE No. 2—CAPACITY 1/8" to 41/2" PIPE

"TOLEDO" pipe vises are a "quality proposition." While they are somewhat higher in price than other vises of similar capacity, they are most economical and satisfactory.

Other malleable pipe vises are limited in their use to holding pipe. "TOLEDO" vise jaws accommodate themselves to irregular shapes and will hold tight anything that will go inside the jaws.

The illustrations show a valve, an ell, a piece of  $\frac{1}{4}$ " pipe and a piece of  $\frac{2^{1}}{2}$ " pipe, all held equally well.

The jaws are much wider than jaws of ordinary pipe vises and have a much larger gripping surface. They are carefully heat treated and when they become dull may be returned to the factory to be recut at small cost.



While these vises are not sold for use in holding nickelplated or polished pipe, "TOLEDO" vise jaws do not mar nickelplated or polished pipe when held tight therein. "TOLEDO" vises are especially adapted for holding electric conduit, and are extensively used by electricians.

The jaws of a "TOLEDO" pipe vise are wide with accurately machined teeth.

"TOLEDO" vises are fully guaranteed, made of the best obtainable materials, and are the most economical vises in the long run.

Pipe Vise	List Price	Net Wt.	Ship. Wt.	Code
No. 1 Vise, \( \frac{1}{8}\)! to \( \frac{2}{2}\)! No. 2 Vise, \( \frac{1}{8}\)! to \( \frac{4}{2}\)!	\$10.00	18 lbs.	18 lbs.	Harp
No. 2 Vise, 1/8" to 41/2"	20.00	48 lbs.	48 lbs.	Hasp

Complete list of repair parts for Vises on page 81.





"Toledo" Portable Work Bench

No. 5—FOR VISE TO HOLD UP TO 41/2" PIPE No. 4—FOR VISE TO HOLD UP TO 2" PIPE

These are very strong and desirable, portable work benches. Made of steel and malleable iron. Do not need to be bolted to the floor.

The legs are held by malleable castings and U-bolts and kept from spreading by steel tie rods. They are adjustable for any unevenness of the floor, and are quickly disassembled.

The table top of the No. 5 Bench is 25" x 10". It is bored for "TOLEDO" pipe vises, Williams Vulcan Chain Vises No. 2 and No. 3, Reed Vises No. 71 and 73, and others with corresponding bolt holes. No. 4 table top is 18" x 7" and bored for "TOLEDO" No. 1, Reed No. 71, Crane No. 1, Williams No. 1 and Armstrong No. 0 vises and others with same bolt holes. Special drilling for other vises is charged for at cost.

Adjustable pipe rest provides ample support for the pipe. These work benches can be furnished on special order with any length table top desired. Quotations on request.

A pipe bender to attach to the No. 5 bench can be furnished on special order. Permits bending 1" or smaller sizes of pipe or conduit easily and will not kink the pipe on short bends.

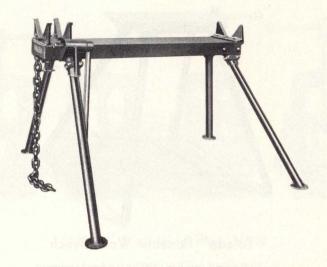


Pipe benders easily attached.

Work Bench, Pipe Bender	List Price	Net	Wt.	Ship. Wt.	Code
No. 5 Work Bench, for Vise to hold up to pipe	\$20.00 pipe. 17.00	75 39 41/	lbs.	75 lbs. 39 lbs. 5 lbs.	Hoard Hod Bend

Complete list of repair parts for Work Benches on page 82.





### "Toledo" Portable Work Bench and Chain Vise

No. 9 CAPACITY 2" to 14" PIPE No. 18 CAPACITY 2" to 18" PIPE

The No. 9 bench and chain vise for holding 2" to 14" pipe is excellent for handling large pipe and heavy work. It is very rigid and strong, and while it is not necessary, it may be bolted to the floor if desired.

The chain vise is of special design, being built up in conjunction with the bench and made a part thereof. The chain is adjustable so that a single downward thrust of the controlling lever grips the pipe tight.



The vise jaws are adjustable for large or small pipe.

The table top is four feet long and twelve inches wide. Table Tops of any length can be furnished on special order. Quotations on request. The vise jaws are removable and may be returned to the factory for recutting when necessary.

It can also be furnished to hold up to 18" O. D. pipe. This bench, the No. 18, is larger and heavier, and the table top is six feet long and 15" wide. A wonderful bench for extra large pipe.

These work benches are practically indestructible and will give years of satisfactory service.

Work Bench	List Price	Net Wt.	Ship. Wt.	Code
No. 9, with Chain Vise to hold 2" to 14" Pipe. No. 18, with Chain Vise to hold 2" to 18"	.\$100.00	210 lbs.	265 lbs.	Hum
O. D. Pipe	.\$210.00	375 lbs.	450 lbs.	Home





"Toledo" Vise Mounts and Roller Support

The "TOLEDO" Vise Mount is a strong, portable work bench. It is instantly set up, always ready for use. When carried from job to job the legs are folded up much like an umbrella, making a "TOLEDO" Vise Mount extremely portable. A very popular work bench with plumbers and electricians.

The top may be drilled to fit any vise if template is furnished. Special drilling is charged for at cost.

The vise mount is made in three sizes, as listed below, to suit requirements.

The roller support shown in the illustration above, is used for holding long lengths of pipe, and can be connected to the vise mount by using a length of  $3/4^{11}$  pipe inserted through holes in both the vise mount and the roller support for that purpose.

The No. 0 mount is large enough for a vise to hold up to 1" pipe, the No. 1 for a vise to hold up to  $2^{1}/2$ " and the No. 2 for a vise to hold up to  $4^{1}/2$ " pipe.

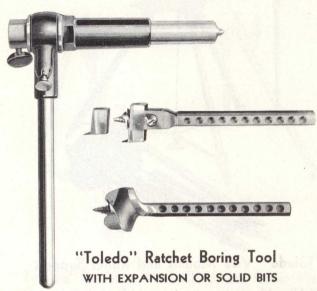


It's easy to carry a "TO-LEDO" vise mount.

Vise Mounts, Roller Support	List Price	Net Wt.	Ship. Wt.	Code
No. 0, for Vise to hold up to 1" pipe. No. 1, for Vise to hold up to 21/2" pipe	2 15.00	36 lbs. 49 lbs.	36 lbs. 49 lbs.	Hazard Hazel
No. 2, for Vise to hold up to $4\frac{1}{2}$ pipe Roller Support	2 18.00	85 lbs. 18 lbs.	85 lbs. 18 lbs.	Hearty Health

Complete list of repair parts for "TOLEDO" Vise Mounts and Roller Support on page 83.





This tool is exceedingly efficient and desirable for plumbers, steamfitters and electricians. It bores holes through joists, beams and other wood members of buildings, where parallel or adjoining timbers interfere with the use of brace and bit or mallet and chisel.

It enables the operator to run pipe or conduit through cleanly bored holes, without sacrificing the strength of weight-carrying timbers.

The bit is automatically fed by means of a strong steel spring contained in the telescopic barrel of the tool, and the ratchet handle makes it easy to operate the tool in the most confined quarters.

The bits have a long shank, providing a range of adjustment of approximately 611.

The tool has been found to be especially valuable on remodeling jobs where piping is required to be installed in structures already built.

It is furnished with either the expansion bit, which will bore holes from  $1\frac{1}{4}$ ! to  $2\frac{1}{2}$ ! in diameter, or with one or more of the solid bits that are listed below. Each tool is packed in a carton.

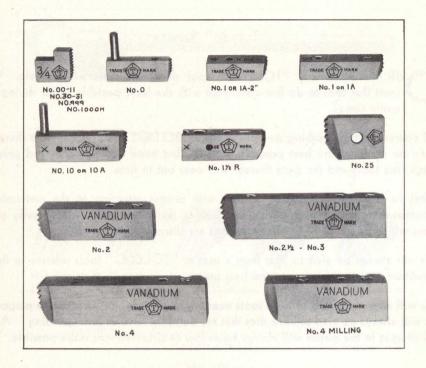


Bit is fed automatically.

Tool, Extra Bits	List Price	Net Wt.	Ship. Wt.	Code
Boring Tool, Only without bits	.\$15.00	5 lbs.	6 lbs.	Hawser
Expansion Bit, 11/4" to 21/2" inclusive		1 lb.	1 lb.	Hansom
21/211 Solid Bit	. 6.00	15 oz.	1 lb.	Haze
2" Solid Bit	. 4.50	13 oz.	1 lb.	Heart
11/211 Solid Bit		12 oz.	1 lb.	Heap
1" Solid Bit	. 2.20	10 oz.	1 lb.	Hectic

Complete list of repair parts for Ratchet Boring Tool on page 84.





# Genuine "TOLEDO" Dies

The above illustration shows a single die segment of each of the various types used in "TOLEDO" pipe threaders. We show these illustrations so there may be no confusion in the mind of the jobber or user of "TOLEDO" tools as to which particular model any given set of dies may be for.

The illustration shows these various die segments approximately one-half the actual size.

The markings on the dies may also be of interest. The trade-mark that appears on all genuine "TOLEDO" dies, is the equivalent of our signature guaranteeing quality. The word "Vanadium" that appears on some of the segments, indicates the nature of the alloy from which those dies are made. Some of the dies are made of tungsten high speed steel, others are made of a special high carbon alloy. The variation in the kinds of steel used, being



The Trade-Mark Appears Only On Genuine "TOLE-DO" Dies. Our Guarantee of "TOLEDO" Quality.

the result of years of experience as to which will give the best possible service.

BUY BY COMPARISON AND YOU WILL BUY GENUINE "TOLEDOS"



#### "Toledo" Service

UR interest in any "TOLEDO" tool does not cease with its sale. We want that tool to do first-class work with the least possible labor during its entire career.

Of course, there is nothing magical about "TOLEDO" tools or the parts thereof. They are made of the best possible material, but even under normal and proper usage, the tools and the parts thereof will wear out in time.

What we desire to emphasize is, that with proper attention to the instructions accompanying each tool same will last longer, do better work and generally give more satisfaction than if these suggestions are disregarded.

We will always be glad to hear from a user of "TOLEDO" tools relative to their condition, and to advise as to the best practice to pursue in their use.

We will always be glad to have tools needing repairs sent in to us for this purpose; we will always be glad to have dies that are dull sent in to us for regrinding. And our charges in the matter will always be as low as circumstances make possible.

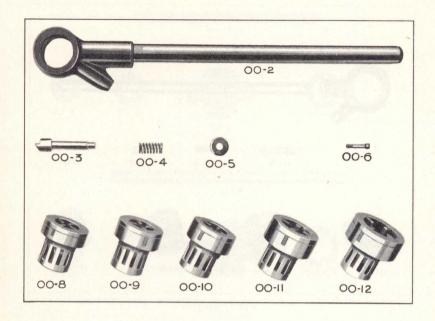
### When In Need Of Repairs

Please bear in mind that most of the parts of modern hand-operated threading tools are moving parts, and subject to wear. Therefore, when a tool needs a die head, or a pipe holder, or a gear part, it is practically certain that the remaining portions of the tool have been worn through use and will also need attention, or perhaps replacement. In your own interest, it will be wise for you, under these circumstances, to send to us the complete tool body, together with all the dies belonging thereto, with instructions to put the whole outfit in proper working order.

When a new die segment is wanted for a set of old dies, do not ask us to supply that segment unless you send to us all the remaining parts of the set of dies referred to, so that the new segment may be properly matched in.

Where we advise the return of various parts of the tools on the following pages, these suggestions are based on years of experience and with the sole thought of taking care of the customer's needs in the most economical and satisfactory manner for him, and we urge therefore that they be complied with.



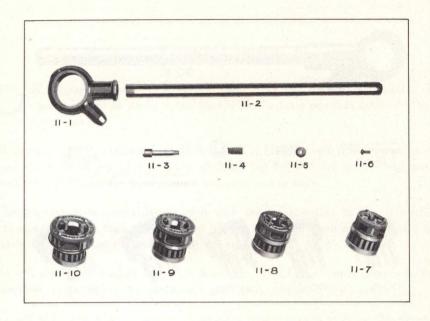


# Repair Parts No. 00

Number		Price
	Dies, R. H., complete set	\$10.00
	Dies, R. H., single set	2.00
	Special Die Heads with U. S. S. Bolt Dies, 1/4" to 7/8", each	3.00 Net
	U. S. S. Bolt Dies, only, 1/4" to 7/8", each	2.00 Net
	Ratchet Handle, complete (with Ratchet Pawl)	
00-2	Ratchet Head and Handle only (without Ratchet Pawl)	
00-3	Ratchet Pawl	.60
00-4	Ratchet Spring	.20
00-5	Ratchet Pawl Knob	.30
	Ratchet Pawl, complete	1.10
	Die Head Cover, only	
*00-6	Die Head Cover Screw	.08
00-8	1/8-inch Die Head with Dies	3.00
00-9	1/4-inch Die Head with Dies	3.00
00-10	3/8-inch Die Head with Dies	
00-11	½-inch Die Head with Dies	3.50
00-12	3/4-inch Die Head with Dies	3.50

<sup>\*</sup>When ordering 00-6 Die Head Cover Screws always specify for what size Die Head. When ordering repair parts, first read carefully and follow the instructions on page 58.





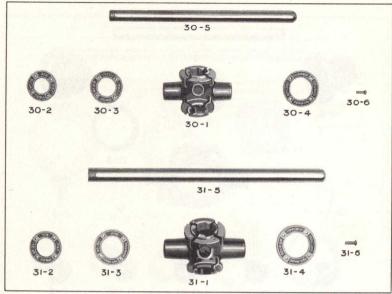
# Repair Parts

### No. 11

Numbe		Price
	Dies, R. H., complete set\$	9.00
	Dies, R. H., single set ½ or ¾-inch	2.00
	Dies, R. H., single set 1 or 11/4-inch	2.50
	Ratchet Handle, complete	4.00
11-1	Ratchet Head	1.00
11-2	Handle, only	1.25
11-3	Ratchet Pawl	.60
11-4	Ratchet Spring	.20
11-5	Ratchet Pawl Knob	.30
	Ratchet Pawl, complete	1.10
	Die Head Cover (Specify Size)	.60
11-6	Die Head Cover Screw, each	.05
11-7	1/2-inch Die Head with Dies	5.00
11-8	3/4-inch Die Head with Dies	5.00
11-9	1-inch Die Head with Dies	5.00
11-10	11/4-inch Die Head with Dies	5.00
	Special 3/8-inch Die Head with Dies	5.00

When ordering repair parts, first read carefully and follow the instructions on page 58, and always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of the tool.



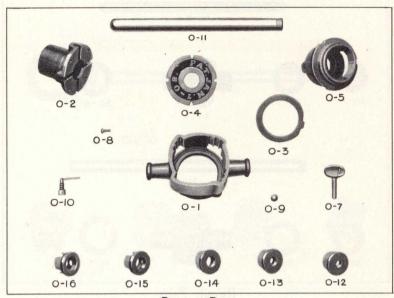


Repair Parts No. 30 and No. 31

	No. 30	
Numb	oei.	Price
	Dies, R. H., complete set\$	6.00
	Dies, R. H., single set	2.00
30-1	Body, only	5.50
30-2	3/8-inch Die Head Cover	.60
30-3	½-inch Die Head Cover	.60
30-4	3/4-inch Die Head Cover	
30-5	Handles, pair	2.25
30-6	Head Cover Screws, each	.05
	No. 31	
	Dies, R. H., complete set\$	6.50
	Dies, R. H., single set 1/2 or 3/4-inch	2.00
	Dies, R. H., single set 1-inch	2.50
31-1	Body only	7.00
31-2	½-inch Die Head Cover	.60
31-3	3/4-inch Die Head Cover	.60
31-4	1-inch Die Head Cover	.60
31-5	Handles, pair	2.50
31-6	Head Cover Screws, each	.05

When ordering repair parts, first read carefully and follow the instructions on page 58, and always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of the tool.





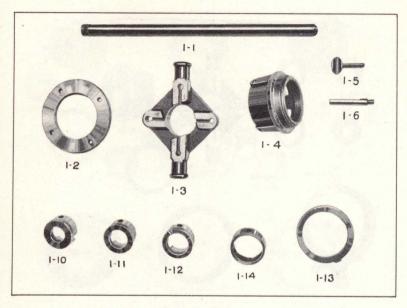
Repair Parts No. 0

0-1 [ 0-2 [ 0-3 ]	Dies, R. H., complete set	. 2 . 12 . 2 . 3
0-1 [ 0-2 [ 0-3 [	Dies, L. H., complete set	. 12 . 2 . 3
0-1 [ 0-2 [ 0-3 [	Dies, L. H., single set	. 2
0-1 [ 0-2 [ 0-3 [	Die Head Case	. 3
0-2 I	Die Head	. 2
0-3 F		
10 10 10 10 10 10 10 10 10 10 10 10 10 1	Retaining Ring	
0 4 1		
0-4	Die Head Cover	. 1
0-5 F	Pipe Holder	. 2
0-7	Thumb Screw, each	
0-8	Cover Screw, each	
	Die Spring Discs, each	
	Locking Pin and Spring, each	
	Handles, pair	
0-12	1/g-inch Bushing	
0-13	1/4-inch Bushing	
0-14	3/8-inch Bushing	
	½-inch Bushing	
	3/4-inch Bushing	

<sup>\*</sup>When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58.



When ordering repairs always specify the serial number and prefixing letter, if any, which appear on the brass name plate of the tool.

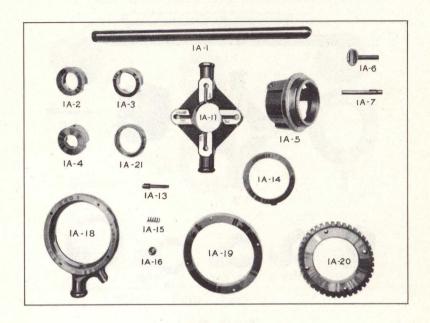


# Repair Parts No. 1

Numbe		Price
	Dies, complete set	10.00
	Dies, single set	2.50
1-1	Handle, pair	2.50
1-2	Taper Pin Plate	3.00
*1-3	Die Head	4.50
*1-4	Pipe Holder	3.00
1-5	Thumb Screws, each	.20
1-6	Taper Pin, each	.40
	Die Retaining Spring	.20
1-10	1 -inch Bushing	.50
1-11	1½-inch Bushing	.50
1-12	1½-inch Bushing	.50
1-14	2 -inch Bushing	.50
1-13	Retaining Ring	1.50

<sup>\*</sup>When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. Repair parts for the No. 1 tool are subject to discounts differing from those applying to complete tools. See current discount sheet. When ordering repairs always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of the tool.





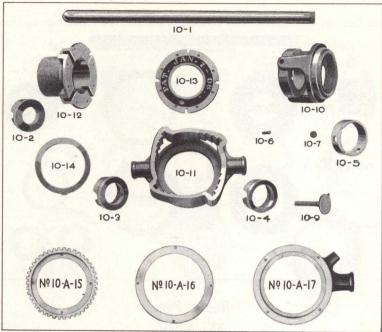
### Repair Parts No. 1A

Number		Price	Number	Price
	Dies, R. H., complete set	\$10.00	Not illustrated—	
	Dies, R. H., single set	2.50	Die Retaining Spring	
1A-1	Handle, per pair		Die Retaining Spring one	
1A-2	11/4-inch Bushing		Nail of	
1A-3	1½-inch Bushing		Die Retaining Pin each \$	.20
1A-4	1 inch Bushing		Ratchet Case Screw, each	.10
	2-inch Bushing		*1 A-11 Die Head	4.50
*1A-5	Pipe Holder		1A-13 Ratchet Pawl	.60
1A-6	Thumb Screw, each		1A-14 Retaining Ring	1.50
1A-7	Taper Pin, each	.40	1A-15 Ratchet Spring	.20
	A STATE OF THE PARTY OF THE PAR		1A-16 Ratchet Pawl Knob	.30
			1A-18 Ratchet Case	3.50
			1A-19 Ratchet Case Cover	1.30
			1 A-20 Taper Pin Plate	4.00

<sup>\*</sup>When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58.



Repair parts for the No. 1A tool are subject to discounts differing from those applying to complete tools. See current discount sheet. When ordering repairs always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of the tool.



Repair Parts
No. 10 and No. 10A

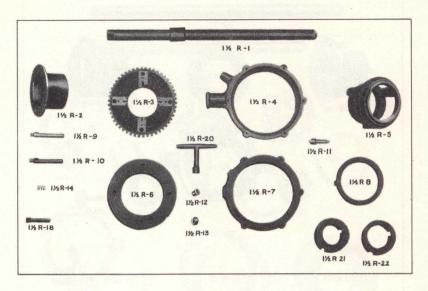
Number	and the state of t	Price	Number		Price
*	Dies, R. H., per set of 4 pieces .\$	2.75	×10-12	Die Head\$	4.00
*	Dies, L. H., complete set	11.00	10-13	Die Head Cover	1.85
*	Dies, L. H., single set	2.75	10-14	Retaining Ring	1.50
10-1	Handles, pair	2.50	Parts add	litional to No. 10 to make No.	10-A
10-2	1 -inch Bushing	.50			
10-3	11/4-inch Bushing	.50	Number		Price
10-4	1½-inch Bushing	.50	10A-15	Ratchet Plate\$	3.50
10-5	2 -inch Bushing	.50		Ratchet Case Cover	1.30
10-6	Die Head Cover Screws, each.	.10		Ratchet Case	3.50
10-7	Die Spring Discs, each	.05		Not illustrated	
10-9	Thumb Screws, each	.20		Ratchet Pawl	.60
x10-10	Pipe Holder	4.50		Ratchet Pawl Spring	.20
10-11	Die Head Case	9.00		Ratchet Case Screws, each.	.10
				Ratchet Pawl Knob	.30
	and the state of t			Rivets, each	.05
				A CONTRACT OF THE PROPERTY OF	

<sup>\*</sup>Right hand dies sell at list: left hand dies subject to discount. See current discount sheet.

xWhen either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58.

When ordering repairs always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of the tool.





# Repair Parts

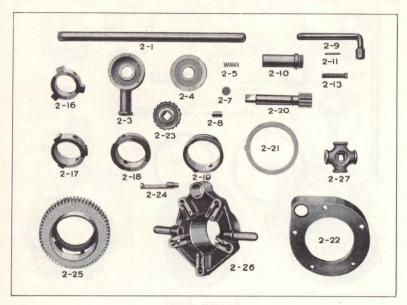
No. 11/2R

Dies, complete set (11½-					Price
		11/2R-12	Ratchet Bushing	\$	.60
thread)\$	12.00	11/2R-13	Ratchet Knob		.30
Dies, complete set(8-thread)	8.00	11/2R-14	Ratchet Spring		.20
Dies, single set	4.00				
Handle	3.00		Not illustrated		
Lead Screw	3.60		Ratchet Case Screws, e	ach	.10
Ratchet Die Head	6.00		Die Head Rivets, each		.05
Ratchet Case	4.50				
Pipe Holder	6.00	11/2R-18	Set Screws, each		.20
	3.60		Not illustrated		
Ratchet Cover	2.00				- 00
				-	.20
		11/4R-90			.60
Natchet Fawi	.00				
		1 /211-21			.90
		11/P.00			.90
Named widow want College Streets assets .	Dies, complete set(8-thread) Dies, single set	Dies, complete set(8-thread)       8.00         Dies, single set	Dies, complete set(8-thread)       8.00       1½R-14         Dies, single set	Dies, complete set(8-thread)       8.00       1½R-14 Ratchet Spring         Dies, single set       4.00         Handle       3.00       Not illustrated         Lead Screw       3.60       Ratchet Case Screws, each         Ratchet Die Head       6.00       Die Head Rivets, each         Ratchet Case       4.50         Pipe Holder       6.00       1½R-18 Set Screws, each         Taper Pin Plate       3.60       Not illustrated         Ratchet Cover       2.00       Die Retaining Spring         Ratening Ring       1.50       and Pin         Taper Pins, long, each       .75       and Pin         Taper Pins, short, each       .75         Ratchet Pawl       .60       1½R-20       Set Screw Wrench         1½R-20       Set Screw Wrench       1½R-21       2-inch Bushing (for sp	Dies, complete set(8-thread)       8.00       1½R-14 Ratchet Spring         Dies, single set       4.00         Handle       3.00       Not illustrated         Lead Screw       3.60       Ratchet Case Screws, each         Ratchet Die Head       6.00       Die Head Rivets, each         Ratchet Case       4.50         Pipe Holder       3.60       Not illustrated         Taper Pin Plate       3.60       Not illustrated         Die Retaining Spring and Pin       Die Retaining Spring of each         Taper Pins, long, each       .75       Die Retaining Spring Screw         Taper Pins, short, each       .75       Screw

<sup>\*</sup>When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58.



NOTE—In ordering parts for this tool it will be necessary to state whether it is a Standard Pipe Thread Tool (8-thread), or one of the special (11½-thread) tools. This tool is made both ways and all parts are not interchangeable. When ordering repairs always specify the serial number and the prefixing letter, if any, which appear on the brass name plate of tool.

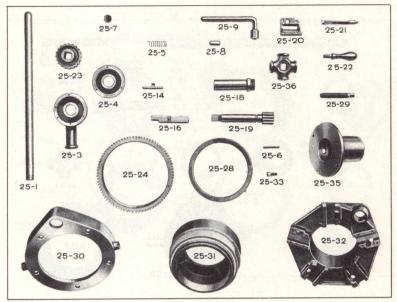


Repair Parts No. 2

Numb	er ·	Price	Numb	er Price
*	Dies, complete set	32.00		Not illustrated
*	Dies, single set	8.00		Die Retaining Spring Screw one
	Ratchet, complete	7.00		Die Retaining Spring of \$.20
2-1	Handle	2.00		Die Retaining Pin each
	Not illustrated		2-16	2½-inch Bushing 1.80
	Lifting Handles, each	1.25	2-17	3 -inch Bushing 1.80
	Ratchet Cover Screw	.10	2-18	3½-inch Bushing 1.80
2-3	Ratchet Case	3.00		4 -inch Bushing 1.80
2-4	Ratchet Case Cover	1.00		Driving Pinion 5.00
2-5	Ratchet Spring	.20	2-21	Retaining Ring 2,00
2-7	Ratchet Spring Washer	.10	2-22	Taper Pin Plate 4.00
2-8	Ratchet Pawl	.60	2-23	Ratchet Wheel 1.50
2-9	Set Screw Wrench	.60	2-24	Taper Pin, each
02-10	Pinion Sleeve	3.50	x2-25	Gear 17.00
2-11	Pinion Retaining Pin	.10	x2-26	Die Head 20.00
2-13	Set Screw, each	.20		Driving Cross 1.00

\*Subject to special discounts. See current discount sheet. oWhen either one of these parts is required, the other part should be returned so the new one can be properly fitted, or both parts should be ordered to insure a proper fit. xWhen either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. When ordering repairs always specify the serial number and prefixing letter, if any, which appear on the brass name plate of the tool.



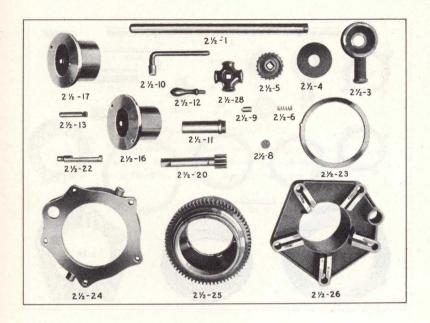


Repair Parts No. 25

Number		Price	Number	Price
	Ratchet, complete\$	7.00	025-18 Pinion Sleeve\$	5.00
25-1	Handle	2.00	o25-19 Driving Pinion	7.00
	Ratchet Case Screw, each	.10	25-21 Taper Pin, each	3.00
25-3	Ratchet Case	3.00	25-22 Lifting Handle, each	1.50
25-4	Ratchet Case Cover	1.00	25-23 Ratchet Wheel	1.50
25-5	Ratchet Spring	.20	x25-24 Gear Band	20.00
25-6	Pinion Retaining Pin	.10	Not illustrated	
25-7	Ratchet Washer	.10	Die Holder Spring, each	.10
25-8	Ratchet Pawl	.60	*Die Holder Pawl, each	1.00
25-9	Set Screw Wrench	.60	Die Holder Pawl Pin, each	.10
95 7	Not illustrated		25-28 Retaining Ring	4.00
	Die Retaining Screw, each	.30	25-29 Set Screw, each	1.25
	Taper Pin Washer, each	.10	25-30 Taper Pin Plate	8.00
	Die Collar, each	.10		30.00
	Dies, per set of 5 segments	8.00		45.00
*25-14	Adjusting Ratchet, each	4.00	25-33 Bushing Screw, each Not illustrated	.30
	Die Holder Spring Cover, each	.10	Die Head Button, each	.10
*25-16	Die Holder, each	5.00	25-35 Bushing (2½'', 3'', 3½'', 4'', 4½'' or 5''), each	5.00
	Not illustrated	10	25-36 Driving Cross	1.00
	Head Cover Screw, each	.10	23-30 Driving Cross	1.00

<sup>\*</sup>When these parts are ordered the old parts must be returned to the factory in order to properly match up new parts. oWhen either one of these parts is required, the other part should be returned so the new one can be properly fitted, or both parts should be ordered to insure a proper fit. xWhen any of these parts are required, they must be ordered together, or complete tool body returned to the factory for proper repairs. We recommend the latter. See instructions on page 58. When ordering repairs it is absolutely necessary that you specify serial number and prefixing letter, if any, which appear on the brass name plate of the tool.





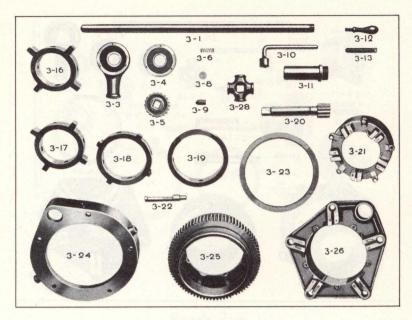
## Repair Parts No. $2\frac{1}{2}$

Number		Price	Number	Price
	Dies, complete set	36.00	21/2-13 Set Screw, each	.40
	Dies, single set	12.00		
	Ratchet, complete	7.00	Not illustrated one	
21/2-1	Handle	2.00	Die Retaining Spring and Pin of	.20
	Not illustrated		Die Retaining Spring Screw Jeach	
	Ratchet Case Screw, each	.10		
21/2-3	Ratchet Case	3.00	2½-16 4½-inch Bushing	5.00
21/2-4	Ratchet Case Cover	1.00	2½-17 5 -inch Bushing	5.00
21/2-5	Ratchet Wheel	1.50	o21/2-20 Driving Pinion	7.00
21/2-6	Ratchet Spring	.20	21/2-22 Taper Pin, each	2.50
21/2-8	Ratchet Washer	.10	2½-23 Retaining Ring	4.00
21/2-9	Ratchet Pawl	.60	21/2-24 Taper Pin Plate	12.00
21/2-10	Set Screw Wrench	.60	*21/2-25 Gear	50.00
021/2-11	Pinion Sleeve	5.00	*21/2-26 Die Head	65.00
21/2-12	Lifting Handle, each	1.50	21/2-28 Driving Cross	1.00

oWhen either one of these parts is required, the other part should be returned so the new one can be properly fitted, or both parts should be ordered to insure a proper fit. \*When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. When ordering repairs always specify the serial number and prefixing letter, if any, which appear on the brass name plate of the tool.

Prices apply only for standard parts—other tool parts will be quoted on specially as occasion arises.





Repair Parts No. 3

Number	Price	Number	Price
Dies, complete set Dies, single set Ratchet, complete 3-1 Handle	12.00	Not illustrated Die Retaining Spring and Pin of Die Retaining Spring Screw 3-16 4½-inch Bushing	.20 5.00 5.00
Not illustrated Ratchet Cover Screw, each Pinion Retaining Pin		3-18 6 -inch Bushing	5.00 5.00 7.00 7.00
3-3 Ratchet Case	1.00 1.50 20 10 60 60 5.00	3-21 Die Head Bushing (when this is ordered Die Head must be sent in to us to be fitted) 3-22 Taper Pin, each	20.00 3.00 5.00 10.00 65.00 80.00

oWhen either one of these parts is required, the other part should be returned so the new one can be properly fitted, or both parts should be ordered to insure a proper fit. xWhen either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. When ordering repairs always specify the serial number which appears on the brass name plate of the tool.

Prices apply only for standard parts—other tool parts will be quoted on specially as occasion arises.



#### No. 4 Threading Device

For illustration of parts see preceding page. Parts for No. 4 are of same general appearance as No. 3 parts, except they are much larger.

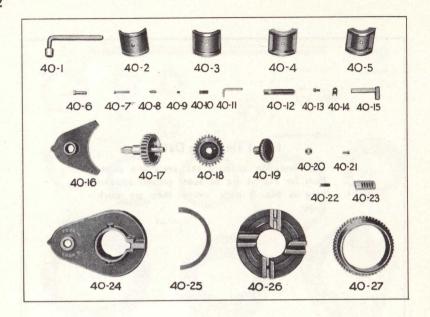
## Repair Parts No. 4

Numb	er	Price	Number Price
	Dies, complete set	\$60.00	Not illustrated one
	Dies, single set	20.00	Die Retaining Spring and Pin of
	Ratchet, complete	9.00	Die Retaining Spring Screw   each \$ .20
4-1	Handle	2.50	
	Not illustrated		4-16 10-inch Bushing 12.00
	Ratchet Cover Screw, each	.10	4-17 9-inch Bushing 12.00
	Pinion Retaining Pin	.10	04-20 Driving Pinion 30.00
4-3	Ratchet Case	3.50	4-21 Die Head Bushing (when this is
4-4	Ratchet Case Cover	1.00	ordered Die Head must be
4-5	Ratchet Wheel	1.50	sent in to us to be fitted) 25.00
4-6	Ratchet Spring	.20	4-22 Taper Pins, each 4.50
4-8	Ratchet Spring Washer	.10	4-23 Retaining Ring 10.00
4-9	Ratchet Pawl	.60	4-24 Taper Pin Plate 30.00
4-10	Set Screw Wrench	.60	x4-25 Gear
04-11	Pinion Sleeve	5.00	x4-26 Die Head160.00
4-12	Lifting Handle, each	1.50	4-27 Die Head Bushing Screw
	Set Screw, each	.40	4-28 Driving Cross 1.00

oWhen either one of these parts is required, the other part should be returned so the new one can be properly fitted, or both parts should be ordered to insure a proper fit. xWhen either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. When ordering repairs always specify the serial number which appears on the brass name plate of the tool.

 $Prices\ apply\ only\ for\ standard\ parts-other\ tool\ parts\ will\ be\ quoted\ on\ specially\ as\ occasion\ arises.$ 





## Repair Parts Automatic Pipe Cutters

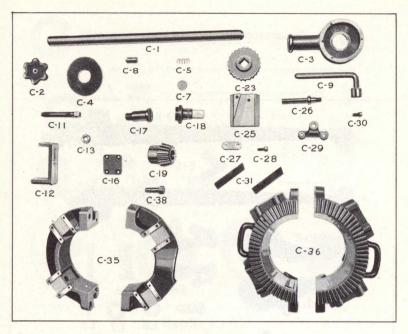
Illustration shows parts for No. 40 pipe cutter, parts for No. 80 cutter are of same general appearance.

	No. 40 Number Price	No. 80 Number Price
Jaw Wrench	. 40-1 \$ .40	80-1 \$ .4
½-inch Bushing	. 40-2 (3 ½") 70	80-2 (41/2"). 5.0
3-inch Bushing	. 40-3 (3")	80-3 (5") 5.0
2 ½-inch Bushing	. 40-4 (21/2")	80-4 (6") 5.0
2-inch Bushing	40-5 (2")	80-5 (7") 5.0
Face Cap Screw	. 40-6	80-6
Back Cap Screw	. 40-7	80-7
Bushing Retaining Screw	40-8	80-84
Oil Hole Screw	. 40-9	80-9
Wrench Spring Clip		80-10
Wrench Spring Clip Screw		
Headless Set Screw Wrench	. 40-11	80-11
Taw Set Screw		80-124
Sliding Post Clip Screw	. 40-13	80-13
Sliding Post Clip		80-140
Jaw and Sliding Post	40-15 1.20	80-15 1.5
		(Post .30 Jaw 1.20
Top Plate	. 40-16 1.50	80-16 2.4
Driving Pinion	. 40-17	80-17
Square Shank End Cap	. 11.50	11.5
Shank Retaining Pin		
Scroll Pinion		80-18
Hand Grip	40-19 1.80	80-19 1.8
Hand Grip Retaining Washer	. 40-20	80-200
Hand Wheel Retaining Washer Screw	. 40-21	80-21
Cutter Blade, each	. 40-22	80-22
Cutter Block	. 40-23 1.50	*80-23 1.5
Cutter Block Screw		
Head Case		80-24 33.0
Head Retaining Ring		80-25 4.0
Head Retaining Ring Screw		
Head		80-26 32.0
Scroll		80-27 35.0

<sup>\*</sup>Specify whether Long or Short Cutter Block required. When ordering repairs always specify the serial number which appears on the brass name plate of the tool.

xWhen one or the other of these parts is required the remaining part must be returned to us to have the new part properly fitted. oWhen Single Cutter Blades required remaining blades must be returned to permit proper matching.





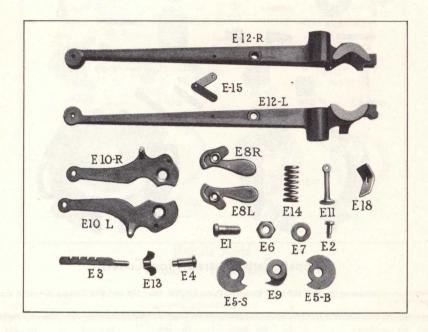
Repair Parts Geared Pipe Cutters

Illustration shows parts for No. 250 Pipe Cutter. Parts for No. 300, 350 and 400 Cutters are same general appearance.

	No. 250 Number Price	No. 300 Number Price	No. 350 Number Price	No. 400 Number Price
Ratchet, complete	\$ 7.00	\$ 9.00	\$ 9.00	\$ 9.0
Handle	C-1 2.00	300-1 2.50	350-1 2.50	400-1 2.5
Hand Grip, each	C-2 50	300-250	350-250	400-25
Ratchet Case	C-3 3.00	300-3 3.50	350-3 3.50	400-3 3.5
Ratchet Cover	C-4. 1 00	300-4 1.00	350-4 1.00	400-4 1.0
Ratchet Spring	C-5 20	300-5 20	350-5 20	400-5 2
Ratchet Washer	C-7 10	300-3 10	350-7 10	
Ratchet Pawl	C-8 60	300-860		
Set Screw Wrench	C-9 60	300-860		
Ratchet Cover Screws, each	Not Illust. 10			400-96
			Not Illust10	Not Illust1
Set Screws, each			350-11 40	400-114
Chuck Jaw, each		300-12 4.50	350-12 4.50	400-12 4.5
Set Screw Collar, each	C-1320	300-1320	350-1320	400-132
Jaw-Plate Screw, each	Not Illust10	Not Illust10	Not Illust10	Not Illust 1
Jaw Plate, each	C-1650	300-1650	350-1650	400-165
Pinion Stud	C-17 2.00	300-17 2.00	350-17 2.00	400-17 2.0
Pinion Shank	C-18 3.00	300-18 3.00	350-18 3.00	400-18 3.0
Pinion	C-19 4.00	300-19 4.00	350-19 5.00	400-19 5.0
Ratchet Wheel	C-23 1.50	300-23 1.50	350-23 1.50	400-23 1.5
Cutter Block, each	C-25 4.50	300-25 4.50	350-25 4.50	400-25 4.5
Knife-Feed Screw, each	C-26 1.00	300-26 1.00	350-26 1.00	400-26 1.0
Cutter Clamp, each	C-27 30	300-2730	350-2730	400-27 3
Cutter Clamp Screw, each	C-28 20	300-28 20	350-28 20	400-28 2
Feed Screw Bracket, each	C-29 80	300-29 80	350-2980	400-29 8
Feed Screw Bracket Screw, ea	C-30 20	300-30 20	350-3020	400-30
Cutter Blades, each	C-31 80	300-31 80	350-31 80	400-31 8
Chuck Frame	C-35 15.00	300-35 27.00	350-35 37.00	400-35 47 (
Cutter Frame	C-36 18.00	300-36 30.00	350-36 40.00	400-36 50.0
Frame Clamping Screw, each	C-38 30	300-38 30	350-38 30	400-38

oWhen the chuck or cutter frames are required it is necessary to ship the cutter to us to have these parts properly fitted. xWhen ordering single cutter blades always specify whether "straight" or "bevel" edge required. A complete set must comprise two "straight" and two "bevel" edge blades. \*The pinion shank is designedly made the weakest part of the tool, so it will break under abnormal strain instead of some more expensive part. We are arbitrarily charging a net price of \$1.00 each for these instead of the list price as shown. †Parts marked thus are subject to discount. See current discount sheet. When ordering repairs always specify the part number as well as the serial number of the Cutter, which appears on the brass name plate of the tool.





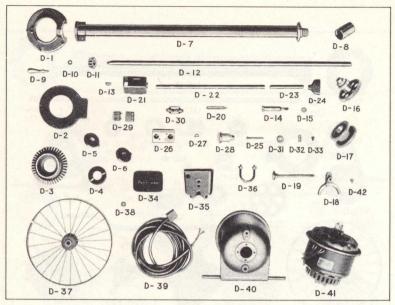
## Repair Parts Vosper Pipe Cutter

The Vosper Pipe Cutter is no longer manufactured. Repairs parts, however, can be furnished on order, as listed.

Numb	r	Price	Number		Price
E1	Cutter Bolt, each\$	.20	E9	Guide Shoe, each \$	.50
E2	Cam Lever Screw, each	.15	*E10-R	Right Cutter Arm	
E3	Tie Bar	.40	*E10-L	Left Cutter Arm Each	1.20
E4	Shoulder Pins, each	.15	E11	Spring Connecting Link	.15
E5-S	Cutter, straight edge		*E12-R	Right Frame	
E5-B	Cutter, bevel edge pair	1.00	*E12-L	Left Frame pair	7.25
E6	Cutter Bolt Nut, each	.20	E13	Thumb Nut, each	.10
E7	Cutter Bolt Washer, each	.12	E14	Spring, each	.40
E8-R	Right Cam	.60	E15	Frame Links, set	.25
E8-L	Left Cam	.60		Cam Springs, each	.08
			E18	V Bearing Plates, pair	.30

<sup>\*</sup>When these parts are wanted, tool must be sent to us for repairs. When ordering repairs always specify the serial number of the Cutter, which appears on the brass name plate.



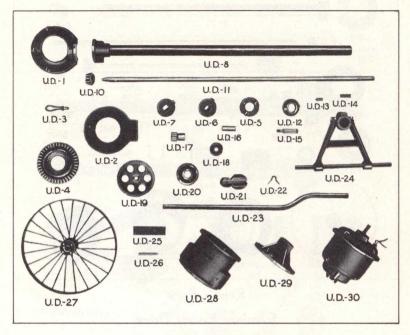


Repair Parts
Standard Power Drive

Numbe		Price	Numbe	Price Price	e
D-1	Bevel Gear Case	\$10.00	†D-28	Fuse Plug, each\$ 3.00	0
-			D-34	Fuse Box Cover 1.50	
D-2	Bevel Gear Case Cover		D-35	Fuse Box	
D-9	Lifting Handle	1.50	D-36	U Bolt 1.90	
D-3	Bevel Gear	14 50	D-37	Wheel, each	
D-4	Driving Bushing Collar		D-38	Wheel Retaining Washer, each 10	
D-5	No. 3 Driving Bushing		D-40	Gear Housing (specify serial number	
D-6	No. 2 Driving Bushing		2 10	of Drive)	0
D-7	Shaft Casing		D-41	Motor (specify serial number of Drive)	
D-10	Bevel Pinion Nut.			300.00, 350.00 or 400.00	0
D-11	Bevel Pinion		D-25	Oil Tube	
D-13	Bevel Pinion Key		D-42	Oil Hole Cover	0
D-12	Driving Shaft	8.50		Wheel Retaining Screw, each 10	0
D-14	Motor Gearing Stud	5.75		Case Cover Screw, each	0
D-15	Motor Gearing Stud Nut	.30		Upper Bearing Screw, each	5
*D-16	Motor Gearing, incl. Bronze Pinion.	22.00		Lower Bearing Screw, each	5
D-31	Motor Pinion and Key			Sliding Gear Drum Screw, each	
D-8	Sliding Gear Drum	7.00		Switch Box Screw, each	5
D-17	Sliding Gears			Switch Handle Mechanism 4.80	
D-32	Sliding Gear Locating Spring			Fuse Box Cover Screw, each	
D-33	Sliding Gear Locating Pin		7	Condulet Screw, each	
D-18	Shifter Fork and Set Screw		Illustrated	Gear Housing Screw, each	
D-19	Shifter Fork Push Rod and Knob	2.70	E E	Bronze pinion only, each	
D-20	Shifter Fork Stud	1.50	181	No. 2 Safety Driving Bushing 4.00	
D-21	Switch Box	4.90	i	No. 3 Safety Driving Bushing 4.00	0
D-39	20 Feet Cable & Connector—3 Wire. 20 Feet Cable & Connector—2 Wire.		Not I	MOTOR PARTS	
D-29	Connector, for 3-Wire Cable	4.80	Z	A. C. Brushes, each	0
	Connector, for 2-Wire Cable	4.00		A. C. Brush Holder Comp., each. 20.00	0
D-30	Toggle Joint Switch	6.00		A. C. Brush Holder Only, each 2.00	0
D-22	Switch Box Conduit	1.20		A. C. End Plate with Bearing, each 28.00	0
D-23	Fuse Box Conduit	. 50		A. C. End Plate less Bearing, each 20.00	0
D-24	Condulet (specify serial number of			A. C. Motor Grid Cover Plates, ea. 1.50	
	Drive)	2.00		D. C. Brushes, each 1.40	0
D-26	Fuse Block	4.00		D. C. Motor Cover Plate, each 2.00	0
D-27	Fusible Link	. 20		3 Phase A. C. Motor Switch 12.00	0

When ordering new parts always specify part number as well as serial number of Drive. \*When any part of motor gearing assembly is needed your old assembly should be returned to us for such salvage as possible. †When fuse plugs are required state whether for 110 volt or 220 volt current.



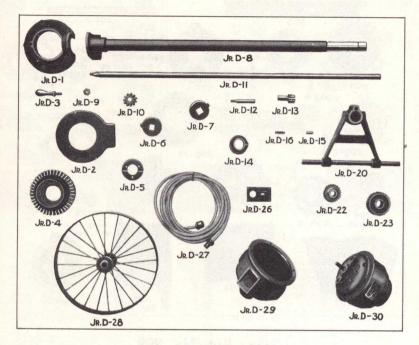


Repair Parts
Universal Power Drive

Number	Pr	ice	Number	Price
U.D1	Bevel Gear Case\$10.	00	U.D21	Switch Base \$ 3.00
U.D2	Bevel Gear Case Cover 10.	00		Switch Base Screw, each
	Bevel Gear Case Cover Screw, each	10		
U.D3	Lifting Handle 1.	50		Switch 5.00
U.D4	Bevel Gear	50		Switch Knob
U.D5	Driving Bushing Collar 1.	25		Cable with Connector and Plug 12.00
		10		Plug only
U.D6		50		Connector only 1.20
U.D7		50	U.D22	Conduit Clip
			U.D23	Conduit
	No. 3 Safety Driving Bushing 4.	00		Conduit Clip Screw, each
U.D8	Shaft Casing 40.			Wire Cover Screws, each
			U.D24	Shaft Casing Saddle
U.D10	Bevel Pinion 12.			Shaft Casing Saddle Cap 2 00
		30		Shaft Casing Saddle Cap Screws, ea 10
		20		Casing Saddle Cover Screw, each
U.D11		50	U.D25	Wire Cover Plate
U.D12		50	U.D26	Rear Motor Bearing Oiler
U.D13		50	U.D27	Wheels, each 4.00
U.D14		30		Wheel Retaining Screw, each 10
		40		Wheel Retaining Washers, each 10
U.D15		00	U.D28	Gear Housing 30.00
		30	U.D29	Gear Housing End Plate 14.00
		10		Gear Housing Screw, each
U.D17		50	U.D30	Motor150.00
		20		Motor Brush, each
		30		Motor Brush Cap, each 1.00
U.D18		20		Motor Bearing Cover Plate 2.00
U.D19	Internal Gear 16.			Grease Plug, each
		05		Oil Hole Cover, each
U.D20	48-Tooth Gear, per pair 20.	00		Motor Bearing, each 6.00

When ordering new parts always specify part number as well as serial number of drive.





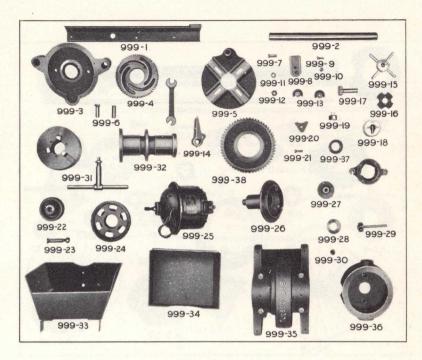
## Repair Parts Junior Power Drive

The Junior Power Drive is no longer manufactured, having been replaced by the Universal Drive. Repair parts, however, can be furnished on order as listed.

Jr. D-1   Bevel Gear Case
Connector, only 1.20

When ordering new parts always specify part number as well as the serial number of Drive. †These Gears must be furnished in pairs to insure teeth meshing properly. \*When ordering a motor give full details as to the character of current.



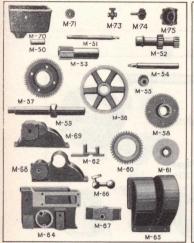


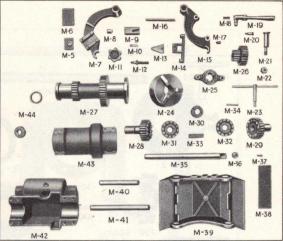
### Repair Parts No. 999

Base Angle Screw	Numb	er Price	Number Price
999-2   Supporting Posts   2   00   999-26   Cil Fump Frame   9   999-27   Cil Fump Cap.   3   3   3   3   3   999-28   Grease Retaining Washer   1   1   1   1   2   2   2   3   999-28   Grease Retaining Washer   1   2   2   2   3   3   3   3   3   3   3	999-1		
Supporting Post Screw   20   999-27   Oil Pump Cap   3   3   3   3   3   3   3   3   3	000 2		
999-3 Cutter Case	999-4		555 at Oil a daily a reminer that the control of th
Cutter Case Screw.   10   999-29   Gil Pump Impeller and Shaft.   2   999-4   Cutter Scroll   10   10   999-30   Gil Pump Bushing.   15   00   0il Pump Shut-off Valve.   1   0il Pump Shut-off Valve.   1   0il Pump Frame Screw.   10   0il Pump Fra	000.3		
999-4   Cutter Scroll   10 00   999-30   Oil Pump Bushing   1   999-50   Oil Pump Shut-off Valve   1   999-50   Oil Pump Frame Screw   1   999-70   Oil Pump Frame Screw   1   999-80   Oil Pump Frame Screw   1   999-80   Oil Pump Frame Screw   0il Pump Fra	333-3		
999-5   Cutter Head   15   00   Oil Pump Shut-off Valve   1   1   1   1   1   1   1   1   1	000-4		
10			
Headless Die Head Pin			
999-7   Cutter Knife Stud.   30   999-31   Chuck complete with wrench.   76   76   76   76   76   76   76   7	333-0		
999-8   Cutter Block	999-7		
999-9   Scroll Roller Pin Screw.   30   999-32 Spindle.   30   999-10 Scroll Roller   50   999-33 Oil Pan   15   999-11 Cutter Blade Washer.   15   999-12 Cutter Blade S(Specify bevel or straight   6dge) each.   3   00   00   00   00   00   00   00			
999-10   Scroll Roller   50   999-33   Oil Pan Base Angle Screw   599-12   Cutter Blade Washer   15   599-13   Cutter Blades (Specify bevel or straight edge) each   3 00   Cover Cap Screw   599-34   Chip Pan   5   5   5   5   5   5   5   5   5		Scroll Roller Pin Screw 30	
999-12   Cutter Blades (Specify bevel or straight edge) each   3 .00			
999-12   Cutter Blade Nut.   10   999-34 Chip Pan   5   50	999-11	Cutter Blade Washer	Oil Pan Base Angle Screw
999-13   Cutter Blades (Specify bevel or straight edge) each   3 00   Cutter Blades, per set   12 00   999-35   Base and Cover Cap   50   Cover Cap Screw   999-36   Motor Bracket   16   Grease Fetaining Washer   1   Grease Flug   Oil Hole Cover   1   Oil Hole Cover   Noil Hole Cover   1   Oil Hole Cover   Noil Hole Cover   1   Oil Hole Cover   Noil Hole Co			
Cutter Blades, per set   12 00   999-36   Motor Bracket   16   16   16   16   16   16   16   1			999-35 Base and Cover Cap 50.00
Cutter Blades, per set   12.00   999-36 Motor Bracket   16.999-16 Ejector Fingers, Per Pair   1.40   20.999-15 Cutter Feed Handle, complete   1.85   Cutter Handle Hub   1.40   Cutter Handle Hub   1.40   Cutter Handle Booke   10.999-16 Cutter Handle Spoke   1.00   1.00   Switch Screws   0.5   Switch Screws   0.5   Cable Connector   1.20   Switch Screws   0.5   Cable Connector Screw   0.5   Switch Screws   0.5   Swi	333 20		Cover Cap Screw
999-14   Ejector Fingers, Per Pair.   1.40   Grease Retaining Washer.   1.20   Grease Plug.   Oil Hole Cover.   Oil Ho			999-36 Motor Bracket 16.00
Ejector Finger Set Screw.   20   Grease Plug.	999-14		Grease Retaining Washer 1.20
999-15 Cutter Feed Handle, complete.   1.85   Cutter Handle Hub.   1.40   999-37 Bushings, each (Specify Size).   10   999-38 Friction Gear			
Qutter Handle Hub Retaining Pin   05   Cutter Handle Spoke   10   10   10   10   10   10   10   1	999-15		
Sustant	150	Cutter Handle Hub	
999-16 Cutter Gauge 1 00 999-17 Cutter Pinion 1 60 999-18 Switch Screws 05 999-19 Cable Connector 05 00 Cable Connector Screw 05 Cable Connector Screw 05 Cable complete 8 00 Cable complete 8 00 P99-20 Friction Gear Clamp 03 P99-21 Friction Gear Clamp Screw 10 Double End Wrench 15 P99-22 Pinion and Helical Gear with Bronze Bushings (2 each assembled) 26 00 P99-23 Gear Stud and Nut 3 30 P99-24 Internal Gear 10 P99-25 Gear Stud and Nut 3 30 P99-26 Cutter Pinion 1 10 Public head and Cover—No dies 4 Public head and Cover—No dies 5 P99-26 Pinion and Helical Gear with Bronze 2 1 Public head and Cover—No dies 5 P99-27 Gear Stud and Nut 3 30 P99-28 Gear Stud and Nut 3 30 P99-29 Pinion and Helical Gear with Bronze 10 P99-20 Friction Gear Clamp Screw Wrench Intake Pump Connector and Locknut Intake Pump Connect		Cutter Handle Hub Retaining Pin	
1		Cutter Handle Spoke	
Discharge Pump Connector and Locknut   Switch Screws   0.5	999-16	Cutter Gauge 1.00	
Switch Screws   05   14   Die head and Cover—No dies   5	999-17	Cutter Pinion 1.60	
999-19 Cable Connector	999-18		
Cable Connector Screw			
Second   Cable complete   Second   Se	999-19		
999-20 Friction Gear Clamp 30 1" Die head and Cover—No dies 4. 999-21 Friction Gear Clamp Screw 10 1½" Die head and Cover—No dies 4. Double End Wrench 1.50 1½" Die head and Cover—No dies 4. 999-22 Pinion and Helical Gear with Bronze 2 " Die head and Cover—No dies 5. Bushings (2 each assembled) 26 00 1 Set ½", ¾", ¾" ¼" or ¾" Carbon Steel dies 2. 999-23 Gear Stud and Nut. 3 30 1 Set 11" or 1½" High Speed Steel dies 5.			
999-21 Friction Gear Clamp Screw 10 1½" Die head and Cover—No dies 4 Double End Wrench 1.50 1½" Die head and Cover—No dies 4 Popo-22 Pinion and Helical Gear with Bronze Bushings (2 each assembled) 26.00 1 Set ½", ½" Die head and Cover—No dies 5  999-23 Gear Stud and Nut. 3 30 1 Set 1½", ½", ½" or ¾" Carbon Steel dies 2  999-24 Internal Gear 10.00 1 Set 1½" or 1½" High Speed Steel dies 5		Cable complete 8.00	
Double End Wrench	999-20	Friction Gear Clamp	
999-22 Pinion and Helical Gear with Bronze Bushings (2 each assembled). 26 00 1 Set ½", ½", ½" or ¾" Carbon Steel dies. 2, 999-23 Gear Stud and Nut. 3 30 1 Set 1" or 1½" High Speed Steel dies. 4, 999-24 Internal Gear. 10 00 1 Set 1½" or 2" High Speed Steel dies. 5	999-21		
Bushings (2 each assembled) 26 00 1 Set ¼", ¾", ½" or ¾" Carbon Steel dies 2. 999-23 Gear Stud and Nut 3 3 0 1 Set 1" or 1 ½" High Speed Steel dies 4. 999-24 Internal Gear 10 00 1 Set 1 ½" or 2" High Speed Steel dies 5.		Double End Wrench 1.50	
999-23 Gear Stud and Nut. 3 30 1 Set 1" or 1 ½" High Speed Steel dies. 4. 999-24 Internal Gear. 10.00 1 Set 1½" or 2" High Speed Steel dies. 5.	999-22	Pinion and Helical Gear with Bronze	
999-24 Internal Gear 10.00 1 Set 11/2" or 2" High Speed Steel dies 5.		Bushings (2 each assembled) 26.00	
	999-23	Gear Stud and Nut	
	999-24	Internal Gear	
999-25 Universal Motor	999-25	Universal Motor	Motor Brush, each

When ordering new parts always specify part number as well as serial number of machine shown on brass name plate.







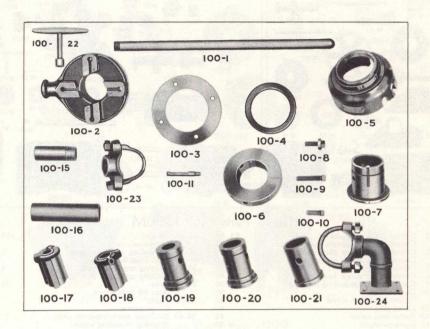
## Repair Parts No. 1000M

		paii		· .	000111			
M-5	Cutter block end plate		\$1.00	M-39	Oil pan		\$24.	00
	Cutter block end plate scre				Oil pan sc	rew		20
M-6	Cutter block cover plate.		40	M-40		arm sup. post		60
	Cutter block cover plate so	rew	10		Sup. Post	Screw		05
M-7	Cutting arm		9.00	M-41		m sup. post		60
M-8	Cutter block screw bushing	Z	1.00			m sup. post screw		05
M-9	Cutter block (including bus	shing)	5.00	M-42				
M-10	Cutter blade		2.00			ole cover		40
	Cutter blade set screw		30	M-43				*
M-11	Hand grip		40			w		20
M-12	Knife feed screw		80	M-44	Bushing,	each, (specify size)		70
M-13	Reamer blade		4.00			etaining screw		30
M-14	Reamer bracket		2.20			etaining screw wrench		20
	Reamer bracket screw			M-51		nion stud		60
M-15	Threading arm				Double pi	nion stud nut		10
M-16	Die head supporting post.		1.00	M-52		nion		
	Die head retaining spring					nion		
	Die head retaining pin		.10	AND THE		nion key		10
	Die head retaining screw			M-54		nion stud		00
M-17	Shifter lever pawl		40			nion stud nut		16
M-18	Shifter lever pawl spring.		10	M-55		ion for A. C. motor		00
	Clutch shifter lever					ions for Un. motor, (pair)		00
M-20	Clutch shifter lever bolt	11 43 1465 1554	50	M-56		r		
	Gear Stud			M-57	Low speed	gear	0	00
	Gear stud nut			M-58	High speed	d gear	11	
	Gear stud oil hole cover			M-59	Driving sh	aft	6	80
	Chuck wrench					naft washer screw		10
	Chuck-complete with wre			M-60		ear band		
	Chuck jaws-standard			M-61	Friction g	ear driving plate	7	00
	Chuck retaining screw					ear plate		50
M-25	1/4" Die head and Cover-	No dies	5.00			ear plate screw		10
	3/8" Die head and Cover-	No dies	5.00		Friction g	ear key		20
	1/2" Die head and Cover—	No dies	4.00	M-62	Gear shift	er	3.	20
	34" Die head and Cover-	No dies	4.00			er guide piece		20
	1" Die head and Cover-N	Vo dies	4.40			er roller		40
	114" Die head and Cover-	-No dies	4.40			er roller pin		40
	1 1/2" Die head and Cover-	-No dies	4.80	M-64	Gear case			
	2" Die head and Cover-N	To dies	5.00		Gear case	conduit		40
	1 Set 14", 38", 16" or 34" C	Carbon Steel di	es. 2.00		Gear case	cover	9.	60
	1 Set 1" or 114" High Spec	ed Steel dies	4.00			er lever and crank		20
	1 Set 1 1/2" or 2" High Spec	ed Steel dies	5.00	M-67	Gear shift	er frame	4.	00
M-26	Intermediate gears\$7.0	0 M-68 M	Iotor Gear G	uard		Removable chip pan	\$ 2	80
	Spindle		. C. Motor.		.\$15.00	Table top		
	Rear clutch gear 10.0		Iotor Gear gr			Table leg (specify right or		-
M-29	Front clutch gear 10.0	0 U	niversal mot	or	.15.00	left)	2	30
M-30	Clutch Collar 2.0	0 M-70 O	il pump rese	rvoir.	. 6.00	Double leg		20
	Clutch Collar Screw 1		il pump gear			Leg bolt		10
	Clutch collar pin 2		il cock			Carriage bolt		10
M-31	Rear clutch face 4 0		il pipe fitting			Cable with connector and		1000
M-32	Front clutch face 4.0		il pump imp			plug	8.	00
M-33	Gear separator plate 3		il pump case			Motor		
	Gear sep. plate screw. 1	0 0	il pump shaf			Motor attaching screw		10
M-36	Driving shaft washer. 4	0 0	il pump case	screws	10	Motor Brush, each		80
M-38	Oil pan tie plate 8		over oil cup.			Switch		00
	Oil pan tie plate screw 1	0 0	il pump oil he	ole cove	er .30	Switch attaching screws		05
District Con-	Contract the second second second second second second			NAME OF TAXABLE PARTY.	CONTRACTOR OF STREET			-

When ordering new parts always specify part number as well as serial number of machine shown on brass name plate.

\*Furnished only with Part M-42 base. Not furnished separately.





Repair Parts
No. 100

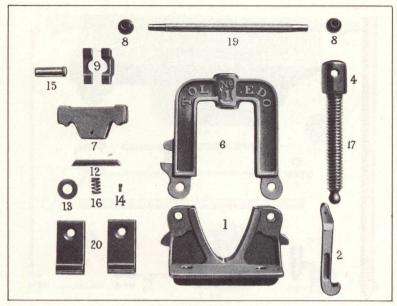
The No. 100 Tool is no longer manufactured. Parts, however, can be furnished on order, as listed.

Numbe	r	Price	Number	Price
	Dies, complete set	\$10.00	Not illustrated	
	Dies, single set	2.50	Die Retaining Spring Nail one	
100-1	Handle	1.25	Die Retaining Spring of \$	. 20
*100-2	Die Head	4.50	Die Retaining Pin each	
100-3	Taper Pin Plate	3.00		
100-4	Retaining Ring	1.50	100-15 1" pipe, 3 ½" long	. 60
*100-5	Chuck Attaching Part	7.50	100-16 1¼" pipe, 6¼" long	. 80
x100-6	Chuck	7.00	100-17 ½" Bushing	2.60
x100-7	Chuck sleeve	5.00	100-18 3/4" Bushing	2.60
100-8	Special Flanged Machine Screws		100-19 1" Bushing	2.60
	½" x 1¼" each	. 60	100-20 11/4" Bushing	2.60
100-9 S	Special Set Screw, 1/2"x21/4", each	. 50	100-21 1½" Bushing	2.60
100-10	Special Set Screw, 1/2"x1 1/2", each	.40	100-22 Set Screw Wrench	.60
	Special Set Screw, 1/2"x1 1/4", each	.40	100-23 Pipe Saddle	2.00
100-11	Taper Pin, each	.40	100-24 Bench Clamp	2.75

<sup>\*</sup>When either one of these parts is required they must be ordered together, or the complete tool body and dies returned to us to be properly repaired or replaced. See instructions page 58. xWhen either one of these parts is required they must be ordered together, or the remaining good part returned to be fitted to the new part. When ordering repairs always specify the serial number which appears on the brass name plate of the tool.

Prices apply only for standard parts—other tool parts will be quoted on specially as occasion arises.





Repair Parts Vises

	No. 1 Vise	No. 2 Vise
	Part No. Price	Part No. Price
Base	1-1\$1.50	2-1\$5.00
Latch	1-250	2-2
Yoke	1-6 1.50	2-6
Crosshead	1-7 1.00	2-7
Balls, pair	1-8	2-8
Crosshead Clips, pair	1-9	2-9
Crosshead Pin	1-12	2-12
Crosshead Washers, pair	1-13	2-13
Crosshead Set Screw	1-14	2-14
Hinge Pin	1-15	2-15
Springs, pair	1-16	2-16
Screw and Screw Top	1-17 1.75	2-17 3.10
Handle	1-19	2-19
*Jaws, pair	1-20 3.50	2-20 5.00

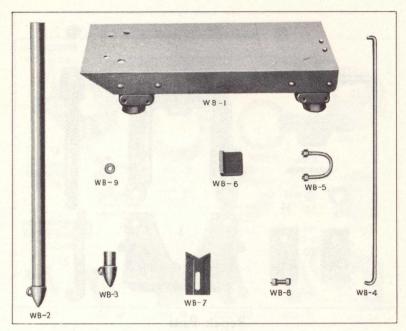
<sup>\*</sup>When the jaws become dull they can be reconditioned at small expense if returned to us.

### Power Drive Helper Parts Not Illustrated

	Price		Price
Finger, each Finger Lug, each Bushing, each Chuck Wrench only Chuck (including wrench) Yoke Chuck Plate Nut Chuck Face Plate Dowel Pin, each	\$ 3.00 .50 .80 5.00 76.00 18.00 5.00 14.00 .10	Finger Screw, each	.10 .10 .05 .70 .10 5 .90 .25 .40
Bench Clamp Chuck Plate Screw, each		Pipe Support	15.00

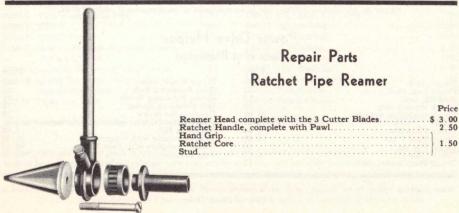
When ordering Power Drive Helper repair parts always specify whether to be used with "TOLEDO" Standard or Universal Power Drive.



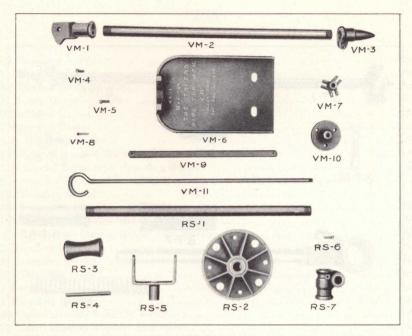


Repair Parts
No. 5 and No. 4 Portable Work Benches

	No. 5 Work Bench Part No. Price	
Table Top, with top leg castings attached	WB-1\$12.00	4B-1\$ 9.00
Leg complete, with bottom leg casting		
Bottom leg casting only	WB-320	4B-320
Tie Rod		
Leg U Bolt		4B-5 28
Pipe Rest Bracket	WB-6	4B-6
Pipe Rest	WB-740	
Pipe Rest Bolt		
Pipe Rest Washer	WB-9	4B-904







Repair Parts

Vise Mounts and Roller Support

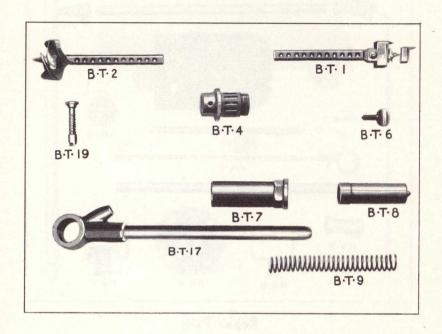
	Size No. 0 Number Price	Size No. 1 Number Price	Size No. 2 Number Price
Top Leg Casting, each	VM-1\$ .80	VM-1\$1.00	VM-1\$1.1
Pipe for Leg, each	VM-2	VM-285	
Bottom Leg Casting, each	VM-380		VM-3 1.1
Set Screw, each	VM-410	VM-4	VM-4
Brace Screw, each	VM-520	VM-5	VM-5
Table Casting	VM-6 2.50	VM-6 3.75	VM-6 6.0
Center Piece Casting	VM-7	VM-7	VM-7
Rivet	VM-805	VM-8	VM-80
Brace Piece		VM-9	VM-9
Floor Plate Casting		VM-10	VM-10
Rod and Hook	VM-1150	VM-1150	VM-11

When Vise Mount Parls are ordered, the size Vise Mount for which the parls are required must be specified.

### ROLLER SUPPORT

	Pipe Leg\$			Roller Frame\$	
RS-2	Base Plate	1.00	RS-6	Set Screw	.10
	Roller		RS-7	Top Casting	1.00
720 4	D-14	20			





# Repair Parts Ratchet Boring Tool

Numbe		Price
	Ratchet Handle, Complete (not illustrated)	3.00
BT-1	11/4 to 21/2-inch Expansion Bit	9.00
	Extra Cutter Blade, only, 21/2" or 2", each	1.50
	Extra Cutter Blade, only 11/211, 11/411 or 111, each	1.20
	Cutter Blade Retaining Screw	.10
BT-2	Solid Bits, 2½-inch size	6.00
	2 -inch size	4.50
	1½-inch size	3.00
	1 -inch size	2.20
BT-4	Chuck	2.50
BT-6	Thumb Screw	.20
BT-7	Outer Barrel	4.00
BT-8	Inner Barrel	4.50
BT-9	Main Feed Spring	.50
BT-17	Ratchet Head and Handle, only	2.00
BT-19	Ratchet Pawl, complete	1.10

NOTE—These Ratchet Boring Tool parts are subject to varying discounts, whereas the bits sell at list. Note carefully current price sheet.



## CODE

No. 00 Threading Device	
No. 11 Threading Device	. Acerb
No. 30 3-way Threading Device	Acture
No. 31 3-way Threading Device	
No. 0 Threading Device	Abacus
No. 1 Threading Device	
No. 1-A Threading Device	. Abaft
No. 1-A Special Conduit Threading Device	
No. 1-A Special Superheater Threading Device	. Super
No. 1 or No. 1-A left hand Threading Device or parts thereof, add code word	Left
No. 10 Threading Device	Hail
No. 10-A Threading Device	
No. 1½-R Threading Device, standard 8-thread	Abash
No. 1½-R Threading Device, special 11½ thread	
No. 2 Threading Device, special 1172 ullead	
No. 25 Threading Device	
No. 23 Inreading Device	Canima
No. 2½ Threading Device	Conjure
No. 3 Threading Device	
No. 4 Threading Device	Appott
No. 40 Cutter, capacity 2-inch to 4-inch	Auto
No. 80 Cutter, capacity 41/2-inch to 8-inch	Allen
No. 250 Cutter, capacity 21/2-inch to 6-inch	Hay
No. 300 Cutter, capacity 4½-inch to 8-inch	. Harem
No. 350 Cutter, capacity 7-inch to 10-inch	
No. 400 Cutter, capacity 9-inch to 12-inch	
"Vosper" Cutter	
Power Drive with A. C. Motor, 60 cycle S. P	
Power Drive with A. C. Motor, 50 cycle S. P	. Ladder
Power Drive with A. C. Motor, 40 cycle S. P.	. Lather
Power Drive with A. C. Motor, 30 cycle S. P.	. Lance
Power Drive with A. C. Motor, 25 cycle S. P	
Power Drive with D. C. Motor	
110 Volt add code word	
220 Volt add code word	Buoyant
Universal Power Drive with 1/2 H. P. 110 Volt Universal Motor	Log
Super Power Drive with 21/2 H. P., 3 Phase, A. C. Motor	
Flange Facing Device	Flood
Power Drive Helper	Help
Special attachment for No. 1 Tool	
No. 1000M Power Threading and Cutting Machine	Sperm
No. 999 Portable Power Threading and Cutting Machine	.Jewell
Pipe Support for No. 1000M or No. 999 Pipe Machine or Power Drive Helper	Sate
No. 100 P. D. Threading Device	Herring
Ratchet Pipe Reamer	Keel
No. 1 Vise	
No. 2 Vise	
No. 5 Portable Work Bench	. Hoard
No. 4 Portable Work Bench	Hod



No. 18 Work Bench, with Chain Vise Home
Pipe BenderBend
No. 9 Work Bench, with Chain ViseHum
No. 0 Vise Mount
No. 1 Vise MountHazel
No. 2 Vise MountHearty
Roller SupportHealth
Ratchet Boring Tool only, without bits
Expansion Bit, 11/4 to 21/2-inch
2½-inch solid bitHaze
2-inch solid bitHeart
1½-inch solid bitHeap
1-inch solid bitHectic
Ratchet Complete for No. 00 Threading Device
1/8" Die Head, complete with dies for No. 00 Threading Device
1/4" Die Head, complete with dies for No. 00 Threading Device
3/811 Die Head, complete with dies for No. 00 Threading Device
1/2" Die Head, complete with dies for No. 00 Threading Device
3/411 Die Head, complete with dies for No. 00 Threading Device
Set 1/8" R. H. Dies only for No. 00 Threading Device
Set 1/411 R. H. Dies only for No. 00 Threading Device, No. 1000M or No. 999 Abdest
Set 3/811 R. H. Dies only for No. 00, No. 30, No. 11 Threading Device, No. 1000M or
No. 999
Set 1/211 R. H. Dies only for No. 00, No. 30, No. 31 or No. 11 Threading Device Aberrant
Set 3/411 R. H. Dies only for No. 00, No. 30, No. 31 or No. 11 Threading Device Abet
Complete set R. H. Dies only for No. 00 Threading Device
Ratchet complete for No. 11 Threading Device
3/811 Die Head complete with Dies for No. 11 Threading Device
1/2" Die Head complete with Dies for No. 11 Threading Device
3/411 Die Head complete with Dies for No. 11 Threading Device
1" Die Head complete with Die for No. 11 Threading Device
11/4" Die Head complete with Dies for No. 11 Threading Device
Set 11 R. H. Dies only for No. 11 or No. 31 Threading Device
Set 11/4" R. H. Dies only for No. 11 Threading Device
Complete set R. H. Dies only for No. 11 Threading Device
Complete set R. H. Dies for No. 30 Threading Device
Complete set R. H. Dies for No. 31 Threading DeviceArctic
Set 1/8" R. H. Dies for No. 0 Threading Device
Set 1/4" and 3/8" R. H. Dies for No. 0 Threading Device
Set 1/2" and 3/4" R. H. Dies for No. 0 Threading Device
Complete Set Right Hand Dies for No. 0 Threading Device
Set 1/8" Left Hand Dies for No. 0 Threading Device
Set 1/4" Left Hand Dies for No. 0 Threading Device
Set 3/811 Left Hand Dies for No. 0 Threading Device
Set 1/2" Left Hand Dies for No. 0 Threading Device
Set 3/4" Left Hand Dies for No. 0 Threading Device
Complete Set Left Hand Dies for No. 0 Threading Device
Set 1" Dies for No. 1 and No. 1-A or No. 100 Threading Device
Set 11/4" Dies for No. 1 and No. 1-A or No. 100 Threading Device



Set $1\frac{1}{2}$ Dies for No. 1 and No. 1-A or No. 100 Threading Device	
Set 2" Dies for No. 1 and No. 1-A or No. 100 Threading Device	
No. 1 or No. 1-A Dies for Threading Brass Pipe add code wordBrass	
Complete Set Dies for No. 1, No. 1-A or No. 100 Threading Device	
Set R. H. Dies for No. 10 or No. 10-A Threading Device	
Set 1" L. H. Dies for No. 10 or No. 10-A Threading Device	
Set 11/4" L. H. Dies for No. 10 or No. 10-A Threading Device	
Set 1½" L. H. Dies for No. 10 or No. 10-A Threading Device	
Set 2" L. H. Dies for No. 10 or No. 10-A Threading Device	
Complete Set L. H. Dies for No. 10 or No. 10-A Threading Device	
Set 2½" Dies, 8-pitch for No. 1½-R Threading Device	
Set 3" Dies, 8-pitch for No. 1½-R Threading Device	
Complete Set Dies for 1½-R Threading Device of 8-pitch	
Set 2" 11½ Tubing Dies for 1½-R Threading Device	
Set 21/2" 111/2 Tubing Dies for 11/2-R Threading Device	1
Set 311 111/2 Tubing Dies for 11/2-R Threading Device	t
Complete Set Dies for No. 11/2-R Threading Device of 111/2-pitch	
Set 21/2" Dies for No. 2 Threading Device	
Set 3" Dies for No. 2 Threading Device	
Set 31/211 Dies for No. 2 Threading DeviceAcme	
Set 4" Dies for No. 2 Threading Device	1
Complete Set Dies for No. 2 Threading DeviceAction	
Set Dies for No. 25 Threading DeviceHemp	)
Set 41/211 Dies for No. 21/2 or No. 3 Threading Device	t
Set 5" Dies for No. 21/2 or No. 3 Threading Device	2
Set 6" Dies for No. 21/2 or No. 3 Threading Device	9
Complete Set R. H. Dies for No. 21/2 Threading Device	2
Set 7" Dies for No. 3 Threading Device	2
Set 8" Dies for No. 3 Threading Device	t
Complete Set Dies for No. 3 Threading Device	d
Set 911 Dies for No. 4 Threading Device	
Set 10" Dies for No. 4 Threading Device	d
Set 12" Dies for No. 4 Threading Device	
Complete Set Dies for No. 4 Threading Device	
(See note bottom of page 25).	A.
Set 10" Plain Milling Dies for No. 4 Threading Device	t t
Set 12" Plain Milling Dies for No. 4 Threading Device	0
†*Cutter Blades, each for No. 40	
Cutter Blades, complete set for No. 40	
†*Cutter Blades, each for No. 80.	
Cutter Blades, complete set for No. 80	
*Cutter Blades, each for Nos. 250, 300, 350 and 400	
Cutter Blades, complete set for Nos. 250, 300, 350 and 400	
Cutter Blades, per pair for Vosper Pipe Cutter	
Guide Shoes, per pair for Vosper Pipe Cutter	
Set ½" R. H. Dies for No. 1000M or No. 999 Pipe Machine	
Set 3/411 R. H. Dies for No. 1000M or No. 999 Pipe Machine	
Set 1" R. H. Dies for No. 1000M or No. 999 Pipe MachineCinde	15

<sup>\*</sup>When ordering single cutter blades always specify whether straight or bevel edge required.

<sup>†</sup>When single blades are required the balance of the set must be returned to have the desired blades matched in.

Set 11/4" R. H. Dies for No. 1000M or No. 999 Pipe Machine	
Set 11/211 R. H. Dies for No. 1000M or No. 999 Pipe Machine	Churn
Set 2" R. H. Dies for No. 1000M or No. 999 Pipe Machine	
Complete Set 1/2" to 2" R. H. Dies for No. 1000M or No. 999 Machine	
Cutter Blade for No. 1000M Pipe Machine	Keen
*Cutter Blade, for No. 999 Pipe Machine	
Cutter Blades, per set of four, for No. 999 Pipe Machine	
1/4" Die Head Complete with Dies for No. 1000M Pipe Machine	
3/811 Die Head Complete with Dies for No. 1000M Pipe Machine	
1/2" Die Head Complete with Dies for No. 1000M Pipe Machine	
3/4! Die Head Complete with Dies for No. 1000M Pipe Machine	
1" Die Head Complete with Dies for No. 1000M Pipe Machine	
11/4" Die Head Complete with Dies for No. 1000M Pipe Machine	
1½" Die Head Complete with Dies for No. 1000M Pipe Machine	
2" Die Head Complete with Dies for No. 1000M Pipe Machine	
1/2 Die Head Complete with Dies for No. 999 Pipe Machine	
3/4" Die Head Complete with Dies for No. 999 Pipe Machine	
1" Die Head Complete with Dies for No. 999 Pipe Machine	
11/4" Die Head Complete with Dies for No. 999 Pipe Machine	
1½" Die Head Complete with Dies for No. 999 Pipe Machine	
2" Die Head Complete with Dies for No. 999 Pipe Machine	
Are holding shipment for	
Can ship all but	
Can ship immediately	
Can ship in time mentioned	
Did you ship as promised	
Duplicate our (my) order of (number)	
F. O. B. destination	
F. O. B. Toledo	Blotting
F. O. B. all points where freight does not exceed \$2.50 per cwt	Rurnich
Has our (my) order ofbeen shipped	
Have telegraphed tracer to locate shipment and expedite delivery	
How soon after receipt of order can you furnish	
Increase our (my) order of	
Rush delivery in every manner possible	ommend
Send tracer for shipment of	
Ship C. O. D	
Ship by Express	
Ship by fast freight and hurry through by wire tracer	
Ship by freight	
Ship Sight Draft attached to Bill of Lading	
Were shipped by	
When will you ship our (my) order	Edif
Will ship immediately	
Will ship in time mentioned	Fac
Will ship quantity of machines specified after this code word immediately	Faynt

<sup>\*</sup>When ordering single cutter blades always specify whether "straight" or "bevel" edge required.



Will ship quantity of machines specified after this code word on date indicatedElect
Wire acceptance of orderEmploy
Your entire order shipped by freightErrand
Your order ofshipped viaExcel
Your order shipped

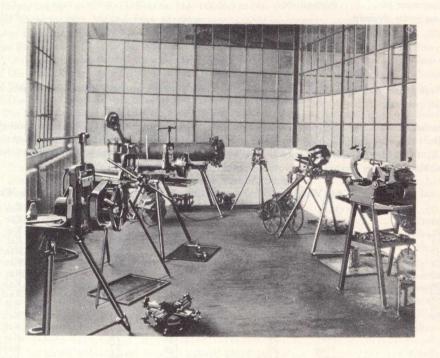
#### NUMBERS

These figures may be used in giving quantities, order numbers, amounts in dollars, weights, car numbers, etc.

To make a word above 99, use the code as follows: For example, 142—14 hol, 2 hef—"holhef." Or 1425—14 hol, 25 hus—"holhus." Or 14,254—14 hol, 25 hus, 4 hek—"holhushek." Or, 142,547—14 hol, 25 hus, 47 ile—"holhusile." Or say car number 100,009—10 hex, 00 hac, 09 hec—"hexhachec."

	Code Word	Code Word	Code Word
0	Hab	27lba	64Kab
00	Hac	28lbe	65 Kac
01	Haf	29lbo	66 Kaf
02	Hak	30lbu	67Kal
03	Hal	31 lca	68Kan
04	Ham	32lco	69Kap
05	Нар	33lde	70 Kar
06	Har	34ldo	71Keb
07	Hav	35ldu	72Ked
08	Heb	36lfa	73Kef
09	Hec	37lfe	74Keh
1	Hed	38lfo	75Kek
2	Hef	39lga	76Kel
3	Heg	40lge	77Kem
4	Hek	41lgo	78Kep
5	Hel	42lha	79Kes
6	Нер	43lho	80Ket
7	Hes	44lhu	81 Kew
8	Het	45lko	82Kob
9	Hev	46lla	83Kod
10	Hex	47lle	84Koh
11	Нос	48llo	85Kol
12	Hof	49Ima	86Kom
13	Hok	50lmo	87Kon
14	Hol	51 Ina	88Kos
15	Hom	52lne	89Kov
16	Hon	53lno	90Kub
17	Hos	54lpa	91 Kuc
18	Hov	55lpo	92Kud
19	Huc	56lqu	93Kuf
20	Hud	57lro	94Kul
21	Huf	58lsa	95Kum
22	Hul	59iso	96Kun
23	Hun	60lta	97Kup
24	Hup	61lto	98Kut
25		62lwa	99Kuv
26		63lwo	





A complete line of "TOLEDO" equipment is on display at our factory display room at 1445 Summit Street, Toledo, Ohio

Here, you will always find a hearty welcome and we will gladly demonstrate to you any "TOLEDO" equipment in which you may be interested

You are cordially invited to call any time you may be in our vicinity





Our New York office and display room at 72 Lafayette Street, New York City, is in charge of our Eastern Sales Manager assisted by competent representatives.

Here, the complete "TOLEDO" line is on display and demonstrations will be gladly given and service calls taken care of promptly and courteously.

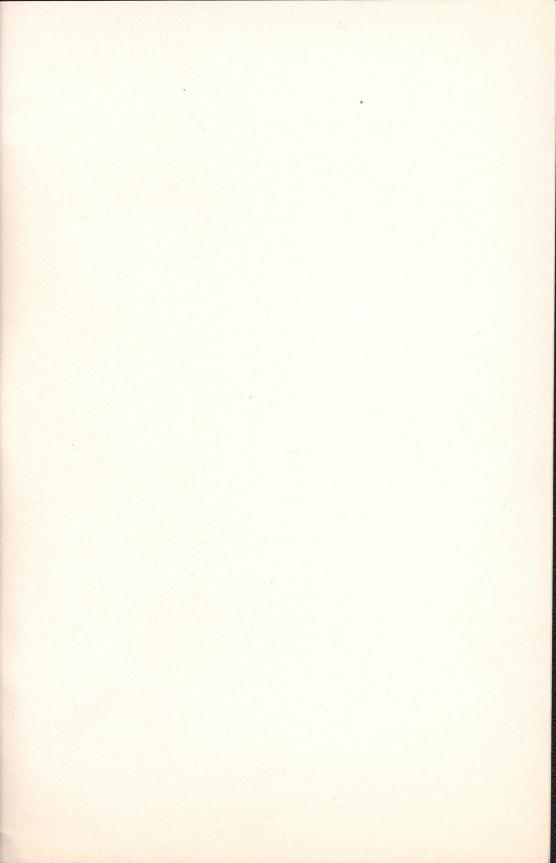


### STANDARD PIPE INFORMATION—Black and Galvanized

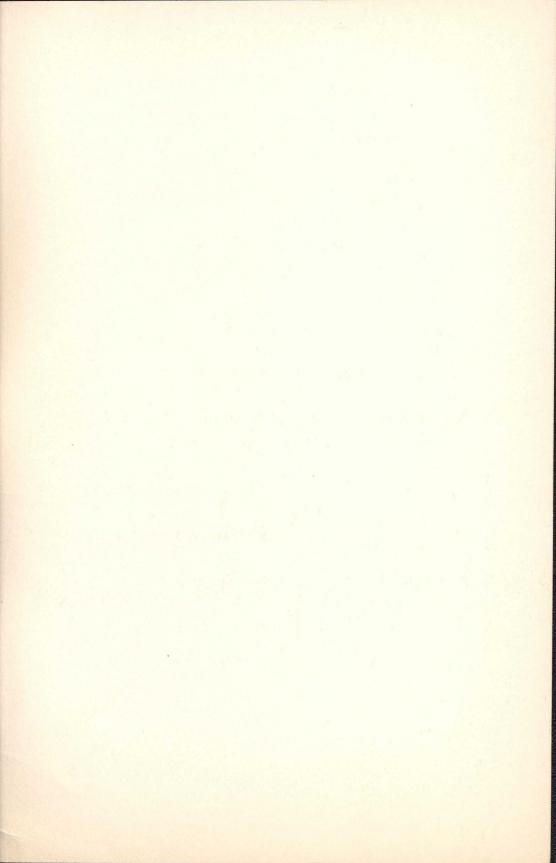
Nominal Size	External Diameter	Internal Diameter	Threads
			per inch
1/8"		.269	
1/4"		.364	18
3/811		.493	18
1/2"		.622	14
3/411	1.050	.824	14
1"	1.315	1.049	11½
11/4"	1.660	1.380	11½
11/2"	1.900	1.610	11½
2"	2.375	2.067	11½
21/2"	2.875	2.469	8
3''	3.500	3.068	8
31/2"	4.000	3.548	8
4"	4.500	4.026	8
41/2"	5.000	4.506	8
5''	5.563	5.047	8
6''	6.625	6.065	8
7''	7.625	7.023	8
8"	8.625	8.071	8
8''	8.625	7.981	8
9"	9.625	8.941	8
10"	10.750	10.192	8
10"	10.750	10.136	8
10"	10.750	10.020	8
11"	11.750	11.000	8
12"	12.750	12.090	8
12"	12.750	12.000	8

Lithographed in U.S.A.





### TO AND A SO THE THE PERSON AS INC. NO. 12 CO. 12 CO





GENUINE "TOLEDO" TRADE-MARKED tools are made only by

THE TOLEDO PIPE THREADING MACHINE CO. TOLEDO, OHIO, U.S.A.